

MOTOR AGE

General Motoring Prosperity 1909's Report

THE motor car industry of the United States is entering upon the greatest year in its history, which means much, for the last two or three seasons have been of extraordinary nature themselves, with the nation's output jumping in monster bounds each year. But 1910 gives every indication of exceeding the fondest dreams of a year ago of the most enthusiastic. From 75,000 cars this year to between 250,000 and 300,000 for 1910 is an advance forward that shows the giant strides of the industry. The estimated output does not exceed the probable demand, but whether or not the car makers will come up to their estimates is hard to say at this writing. The possibilities of their factories have been carefully

gauged and upon these has been based the desired output, but in all probability it will be the parts makers who will be the biggest factors. If they can turn out goods sufficient to fill their orders, then the car production of the United States ought to closely approach the estimates made.

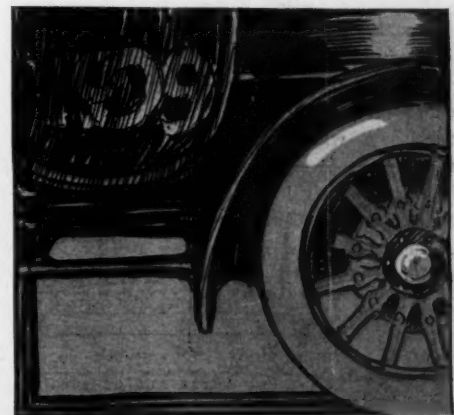
As to the possibilities of these cars being sold after they are manufactured, there can be no doubt after those most interested have read the reports received by Motor Age from its correspondents in the large motoring centers. Without an exception the story is the same—a demand for cars in such quantities that it will tax to the utmost the capabilities of the manufacturers to supply. Detroit, Chicago, New York, Philadelphia, Boston, Cleveland, Denver, Pittsburgh, Washington, San Francisco, Los Angeles—anywhere, everywhere, there is evidence that the entire country is prepared to participate in the coronation of King Motor. Detroit, the great hub of the manufacturing industry, reports that it will turn out from 100,000 to 140,000 cars in 1910, an increase all the more wonderful when it is realized that 44,200 represent Detroit's 1909 output and 17,161 that of 1908.

Chicago, regarded as one of the greatest retail centers in the motoring industry, is preparing for a record-breaking year and its agents declare they can handle all the cars they can get. A most remarkable phase of the industry in the Windy City is the stampede that has taken place and which has resulted in a shift of the Michigan avenue row a couple of miles south of the old center of trade. And what is still more remarkable is the building activity that is going on. There are thirty-one concerns that either have moved into new buildings constructed especially for them or are preparing to



move, representing an investment of \$4,000,000.

Outside of these phases of the situation, a review of the year shows several other features, not the least interesting of which was the decision of Judge Hough sustaining the validity of the Selden patent, which resulted in several of the leading members of the A. M. C. M. A. casting in their lot with the A. L. A. M. Other features of the year include the purchases of big plants by the General Motors Co. and its decision to build a \$2,500,000 factory at Detroit; the jump in the price of crude rubber; the Studebaker-E. M. F. affair and the segregation of the Chalmers-Detroit and Hudson.



Chicago Building New Homes



NEW STUDEBAKER BUILDING NOW RAPIDLY NEARING COMPLETION

CHICAGO, Dec. 21—One-third of the dealers in Chicago either have moved or have made their plans to do so since the roll was called at the end of 1908 and the greatest stampede known in motoring trade history now is on. The fever to get to the southern end of the row—Michigan avenue—is on in earnest and the desire of many of the prominent local concerns to get into the territory around Twenty-second street is so marked as to excite the surprise of the business world, which is astounded at the magnitude of the jump. If for nothing else, the season of 1909 will stand forth prominently in the history of the industry for this reason.

It has been a big year, just about coming up to the expectations of the optimists who predicted a prosperous trade, while ahead there looms a famine in cars, which, of course, means that the local agents and branches will have no trouble in disposing of every machine the factories can send out this way. But the moving stampede—that's the real feature of the year.

Since old Father Time reversed his hour glass last New Year's eve, thirty-one of Chicago's branches and agencies have joined the southern movement. Some of them already are established in the new territory, while all but two or three of the others have either broken ground or have their new buildings well in course of construction. Real estate values in the chosen territory have gone up in leaps and bounds until now they are about as high as they are in the territory which so many are abandoning. The pioneers got in on the ground floor, so to speak, securing their land on a valuation of around \$500 and \$600 a foot, while some of the

late comers are paying as high as \$1,500 for land in the same locality. The storm center is between Twenty-second and Twenty-fifth street, with most of the new places between Twenty-fourth and Twenty-fifth. Only eight of the thirty-one are north of Twenty-second, while the one farthest south is the Babcock, 3½ miles from the business district.

It is not until the statistician gets busy with pencil and paper that one realizes the immensity of this general move. Then it is discovered how quickly it runs into

By C. G. Sinsabaugh

CHICAGO STATISTICS, 1908

Cars sold, wholesale and retail.....	8,500
Makes represented	81
Branches	21
Agencies	54
Garages	118
Manufacturing concerns	302
Motor buggy makers.....	10

money. The amount involved in land and building values totals around \$4,000,000 and one may imagine what that means in rentals when it is known that the real estate men rent land on a basis of 5 per cent and the buildings at 8 per cent on the investment. Few if any of these new properties belong to the motor tradesmen—most every one is a leasehold. The Packard agency owns the building on which it is erecting its new store, but on the land it only has a 99-year lease. The value of the land these thirty-one new stores occupy alone amounts to more than \$2,019,000 and of the buildings which are erected or are being built the valuation reaches \$2,010,500.

One can get an idea of the amount of space that will be occupied by the firms which are moving, for the figures run up to stupendous proportions—about 850,000 square feet. Of course that sounds big, but, drawing comparisons, it is found that the floor space would cover ground the width of Michigan avenue from Twelfth street on the north to Forty-third street on the south, a distance of 3½ miles. Or if laid down square this same floor space would cover 919 square feet. And one must remember that this represents only one-third of Chicago's motoring trade strength. Of course the old places will not run much more, although there are twice as many old places as new; but it is believed that if Michigan avenue were again used as a yard stick that one end would be at Twelfth street and the other abreast of Washington park.

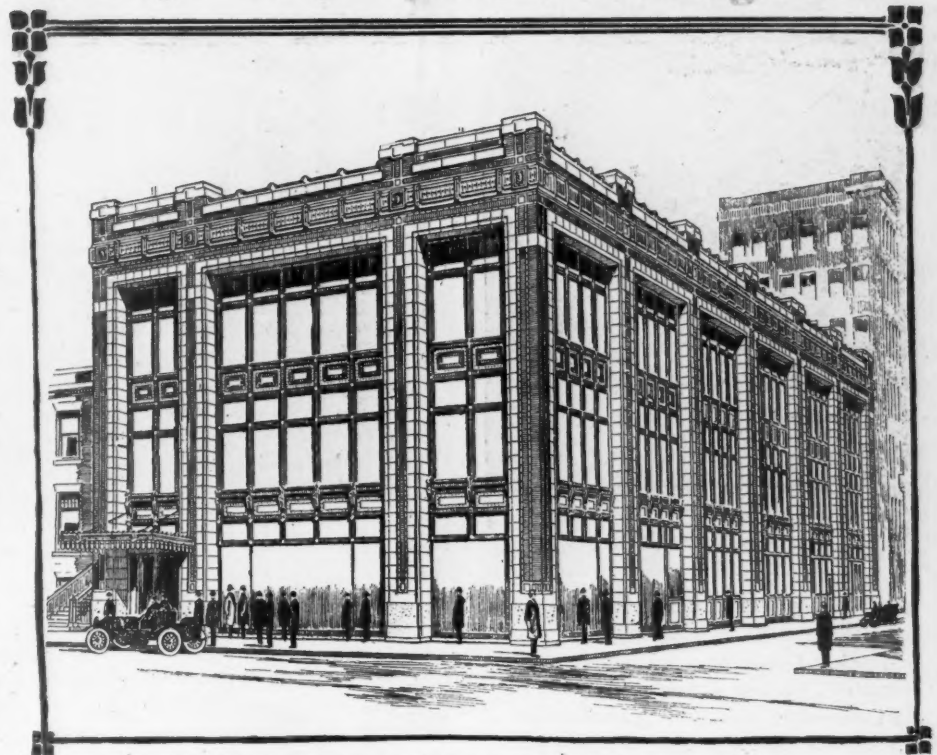
THIRTY-ONE CHICAGO CONCERNS HANDLING MOTOR CARS AND ACCESSORIES

Company	Handling	New Place
Moline Automobile Co.....	Moline	1508 Michigan Ave.....
Automobile Supply Co.....	Regal	1335 Michigan Ave.....
Adams & Engs.....	Frayer-Miller	1619-21 Michigan Ave.....
Morrison Motor Car Co.....	Pierce	1716 Michigan Ave.....
Maxwell-Briscoe Chicago Co..	Maxwell	N. E. cor. Michigan and Eighteenth..
Republic Rubber Co.....	Republic tires	1732 Michigan Ave.....
Locomobile Co. of America..	Locomobile	S. W. cor. Michigan and Twentieth..
Studebaker Bros. Mfg. Co.....	Studebaker line	N. W. cor. Michigan and Twenty-first..
E. R. Thomas Motor Branch Co	Thomas	N. E. cor. Michigan and Twenty-third..
Ralph Temple Auto Co.....	Baker electric	2313-15 Michigan Ave.....
Premier Motor Car Co.....	Premier and Badger..	2329-31 Michigan Ave.....
Brush Chicago Motor Car Co..	Brush	2328 Michigan Ave.....
Mitchell Automobile Co.....	Mitchell	2334-6 Michigan Ave.....
Fiat Automobile Co.....	Fiat	2347-53 Michigan Ave.....
Chicago Motor Car Co.....	Packard	N. E. cor. Michigan and Twenty-fourth..
Speedwell Motor Car Co.....	Speedwell	2411 Michigan Ave.....
Cadillac Automobile Co.....	Cadillac	2412-14 Michigan Ave.....
Anderson Carriage Co.....	Detroit electric	2416 Michigan Ave.....
H. Paulman & Co.....	Pierce-Arrow	2420-22 Michigan Ave.....
Overland Motor Co.....	Overland	2425 Michigan Ave.....
Western Motor Car Co.....	Stearns	2431-33 Michigan Ave.....
Acme Motor Co.....	Acme	2444 Michigan Ave.....
McDuffee Automobile Co.....	Stoddard-Dayton	N. E. cor. Michigan and Twenty-fifth..
Tennant Motor Limited.....	Peerless, Marmon	S. W. cor. Michigan and Twenty-fifth..
American Locomotive Co.....	Alco	S. E. cor. Michigan and Twenty-fifth..
Kissel Motor Co.....	Kissel	2515-17 Michigan Ave.....
James E. Plew.....	White	Wabash Ave. and Twenty-sixth St....
Stromberg Motor Devices Co..	Stromberg carbureter..	64-68 Twenty-fifth St.....
Bulck Motor Co.....	Bulck	Calumet and Twenty-first St.....
Apperson Motor Car Co.....	Apperson	S. W. cor. Indiana and Thirty-third..
Babcock Electric Carriage Co.	Babcock electric	339 East Thirty-ninth St.....

CHICAGO STATISTICS, 1909

Cars sold, wholesale and retail.....	10,000
Makes represented, pleasure cars.....	101
Makes represented, commercial.....	30
Branches	31
Agencies	44
Manufacturing concerns	400
Garages	150

Windy City Row Moves South



NEW PACKARD HOME AT MICHIGAN AND TWENTY-FOURTH STREET

Those in the movement claim they have been forced to move by the high rents and taxes that prevail in the heart of the old row—between Twelfth and Sixteenth—but experienced real estate men cannot understand the spasm. They say that the stampede has forced up rents in the new territory and that for the same price good locations can be had between Twenty-second and Eighteenth, which they say is going to be better for business purposes than the new territory. However, that is a matter of opinion and those who are ensconced south of Twenty-second think they have acted wisely and well.

But the southern movement is not confined alone to Michigan avenue. Some of the bolder ones are invading other territory down that way. Apperson has taken ground at Indiana avenue and Thirty-third street, of which, however, he will not get possession until May 1, while out at Thirty-ninth street and Grant boulevard is located the big electric garage and salesroom of the Babcock branch. James E. Plew, agent for the White, is building one of the biggest motor salesrooms in the city in Wabash avenue south of Twenty-sixth street. The Buick has put up a magnificent wholesale establishment at Twenty-first and Calumet, while the Stromberg carburetor people are building in Twenty-fifth street between Michigan and Wabash.

Henry Nyberg, dealer in second-hand cars is the Captain Streeter who squatted first in the new territory. He went in 2 years ago at 2435 Michigan, where he

erected a three-story building. The Auto-Taxicab Co. built next door south and soon after the Western Motor Car Co., handling the Stearns, got an eye on the location and during the present year it built a fine three-story building on a 50 by 163-foot lot north of Nyberg's. Henry Paulman, Pierce-Arrow agent, quietly located on the west side of the street in the same block and soon after the Stearns people took possession of their place Paulman had his new store well under way. It is a two-story building on a 50 by 177-foot lot, and is most complete in its appointments.

After these pioneers came the others, thick and fast, and now in their new places are the Cadillac, Premier and Mitchell, while buildings for the Packard, Buick, Maxwell, Overland, Brush, Locomobile and Studebaker are well under way and almost ready for occupancy. The Thomas, Speedwell, Baker electric, Stoddard-Dayton, Peerless, White, Detroit electric, Fiat and Alco have been started. Of these the Maxwell, Locomobile and Studebaker are north of Twenty-second street. The Republic tire and the Pierce of Racine are also in this territory, both of them having been in their new stores for some little time.

If a special directory were compiled for the changes it would show that the new heart of the row is moved considerably to the south and that inside another 6 months Michigan avenue, from Twelfth to Twenty-sixth street will be lined on both sides, a distance of 2½ miles, nearly every store being devoted to the motor industry. An accompanying table tells plainer than words the scope of the move, the table showing the new addresses, the size of the buildings, the lot sizes and the estimated valuations:

Not All Moving

It might seem from the above that every branch and agency on the row either is moving or intends to move, but such is far from the case. The migration includes only about one-third of Chicago's trade strength, and even after they all get settled there will not be many noticeable gaps in the old row. In their old places will be found the Rambler, Ford, Woods electric, Githens Brothers, Centaur, Franklin, Velie, Haynes, National, Winton, Cornish-Friedberg, Geyler, Reo, Moline,

RIES WHICH HAVE BUILT OR ARE BUILDING NEW HOMES FOR THEMSELVES

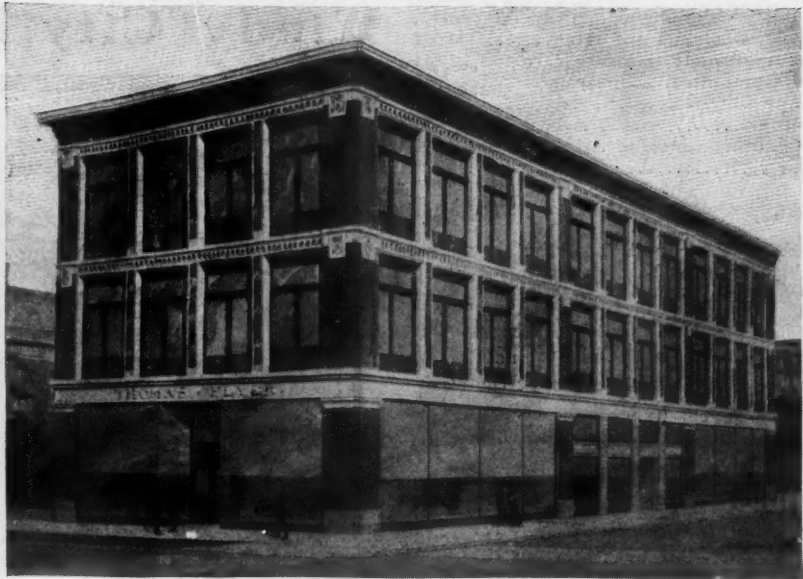
Old Place	Size of Lot	No. of floors	Total Floor Space	Land Valuation	Building Valuation	Total Valuation
1220 Michigan Ave.....	25x178	3	13,350	35,000	15,000	15,000
1339 Michigan Ave.....	30x130	3	11,700	\$ 60,000	\$ 25,000	\$ 85,000
1712 Michigan Ave.....	37½x160	3	19,180	57,000	30,000	87,000
New agency	25x160	3	22,500	45,000	30,000	75,000
1407 Michigan Ave.....	80x172	4	55,040	220,000	80,000	300,000
	52x172	3	27,432	114,400	60,000	174,000
1354 Michigan Ave.....	75x171	3	38,475	115,000	125,000	240,000
378 Wabash Ave.....	74x175	7	89,750	148,000	250,000	398,000
1325 Michigan Ave.....	50x160	3	24,000	100,000	100,000	200,000
New	50x160	3	32,000	75,000	60,000	135,000
236 Michigan Ave.....	39x170	3	19,890	39,000	35,000	74,000
1322 Michigan Ave.....	45x178	2	16,020	60,000	18,000	78,000
1466 Michigan Ave.....	57x167	3	46,895	68,400	60,000	128,400
1424 Michigan Ave.....	70x138	2	20,520	84,000	65,000	149,000
1615 Michigan Ave.....	61x127	3	52,000	61,000	150,000	211,000
1355 Michigan Ave.....	30x164	2	6,720	30,000	15,000	45,000
1312 Michigan Ave.....	35x178	2	12,250	27,000	35,000	62,000
New branch	45x180	2	16,200	45,000	50,000	95,000
1436 Michigan Ave.....	50x177	2	17,700	84,000	30,000	114,000
1413 Michigan Ave.....	30x161	2	9,660	30,000	30,000	60,000
1436 Michigan Ave.....	50x163	3	24,450	28,000	22,000	50,000
New	50x163	3	24,450	25,000	23,000	48,000
1503 Michigan Ave.....	74x161	4	47,656	100,000	100,000	200,000
1449 Michigan Ave.....	60x174	4	42,432	83,000	126,000	209,000
1201 Michigan Ave.....	48x110	4	20,832	75,000	50,000	125,000
1337 Michigan Ave.....	35x160	3	16,800	35,000	35,000	70,000
243 Michigan Ave.....	125x190	4	95,000	90,000	160,000	250,000
1253 Michigan Ave.....	65x110	6	42,900	20,000	94,500	114,500
Whole sale branch	75x200	6	77,400	40,000	80,000	120,000
1240 Michigan Ave.....	50x160	3	17,400	30,000	35,000	65,000
1332 Michigan Ave.....	100x100	1	10,000	6,000	22,000	28,000



PREMIER AND BADGER AGENCY

Chadwick, Columbia, Knox, Kopmeier, Oldsmobile, Palmer & Singer and Renault. The Oldsmobile branch is spreading out a bit, having secured the Walden Shaw building next door south at Michigan avenue and Twenty-first street, into which it will spread. Shaw will seek new quarters, planning to move north and establish a mammoth four-story concrete taxicab garage. The taxicab branch of his business has assumed such gigantic proportions that the sale of pleasure cars almost is incidental, therefore he is catering to the public-hire business as strongly as he can, operating sixty cabs and a fleet of twenty touring cars. The Columbia has just cut into the row with an agency proposition handled by Fred Jenkins and has taken the old Mitchell store. Many of the other stores are new and only occupied in the last year or so, and therefore their occupants see no reason for moving.

Conservative estimates as to the business done in Chicago in 1909 declare there has been an increase of 25 per cent in the volume. Chicago is the distributing point for a vast territory, so that it would seem as if an estimate of 10,000 cars handled from this city would not be far out of the way. It is figured that of this 10,000 probably from 1,500 to 1,800 have been sold to residents of the city or suburbs. The same calculator estimates that the cars sold to Chicagoans have averaged from \$2,300 to \$2,500 in price, but when one takes the city and country as a whole this average is brought down considerably, for the country districts are strong on the low-priced and medium-priced cars. So if one would place the general average at about \$1,500 he would be about right, the critics opine. Chicago also has done a big business in second-hand cars. There are three concerns here which make this branch of business their specialty, and reports from them state that about 2,000 used machines



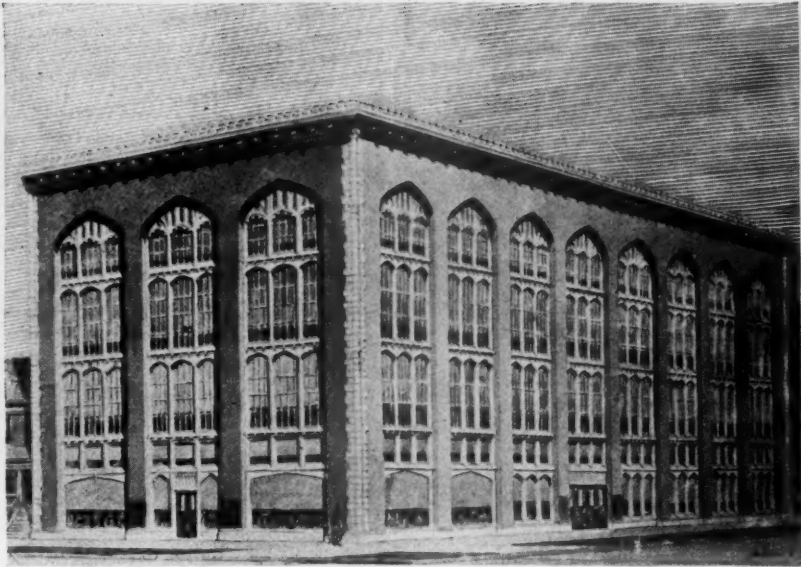
DESIGN FOR NEW THOMAS FLYER BRANCH



WHERE THE PEERLESS WILL BE HOUSED



NEW MAXWELL BRANCH, WHICH WAS COMPLETED LAST WEEK



ARCHITECT'S PLAN OF NEW STODDARD-DAYTON BUILDING



STROMBERG CARBURETOR'S NEW HOME



HOW NEW DETROIT ELECTRIC BRANCH WILL LOOK



COMPLETED BUILDING NOW OCCUPIED BY REPUBLIC TIRE BRANCH

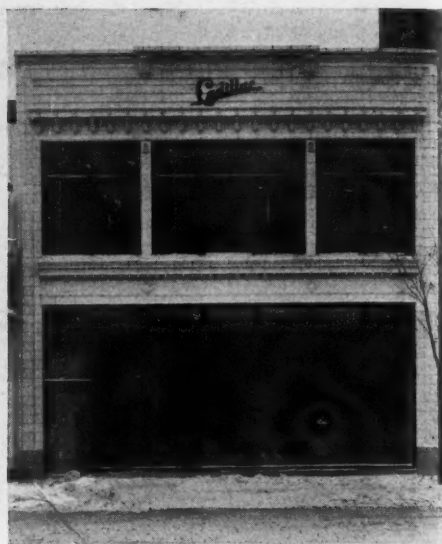
have been disposed of at an average price of \$750. The demand for second-hand cars is big in the country districts.

Granting that Chicago has cleared 10,000 cars in 1909, a summary of the rest of the business shows that there now are handled here more than 100 different makes of pleasure cars, with probably thirty makes of commercial vehicles. Last year there were eighty-one different makes of pleasure machines represented here. There are thirty-one branches handling pleasure cars, as against twenty-one a year ago, while there has been a falling off in agencies, the count showing forty-four as against fifty-four. In 1908 there were 118 public garages, while now a count of the list in the telephone directory, which is one of the best authorities in the matter one can find, shows 150 booked. There are 131 different concerns handling motor supplies, this list including the tire houses, supply houses and the kindred stores. There are listed fifty repair shops, which shows that the owner of a car does not depend entirely upon the concern from which he purchases his machine. There are twenty-one livery and five taxicab concerns.

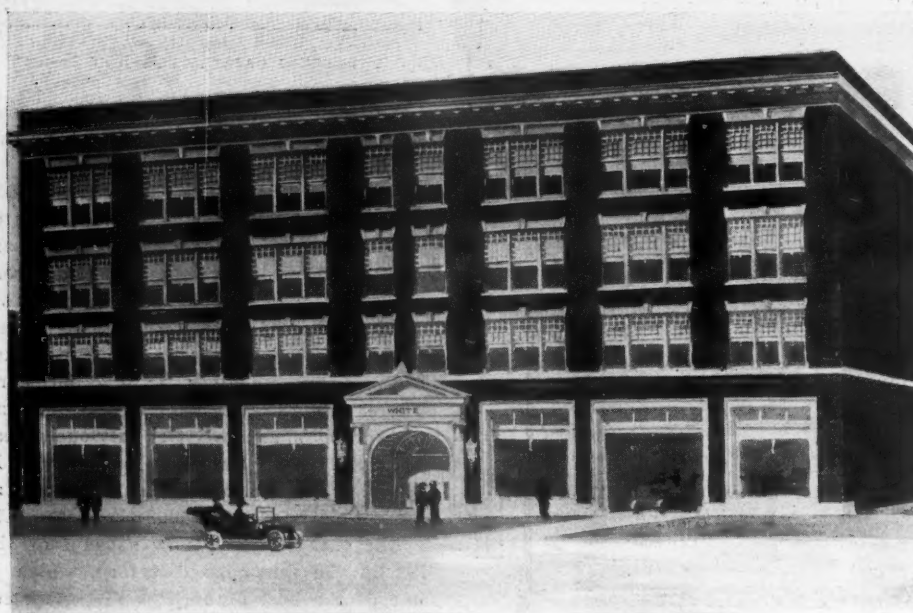
The past year has seen twenty-five new makes of cars come into Chicago. In one or two cases they have been represented here before by agencies, but now branches have cut in, notably in the case of the Alco. The Fiat came in with a branch and brought Chicago's foreign class up to four in point of representation. The Renault has a branch here, while the Isotta and Berliet are represented by agencies, Walden Shaw handling the Berliet and B. C. Hamilton the Isotta. The recruits of the year, besides the Alco and the Fiat, include the Palmer & Singer Simplex, Black Crow, Inter-State, Everitt, Mercer, Pullman, Hupmobile, Columbia, Standard six, Billy, Great Western, Ricketts, Hudson, Badger, Speedwell, Sterling,



NIGHT SCENE AT PIERCE-ARROW AGENCY'S NEW BUILDING



WHERE CADILLAC NOW IS HOUSED



IMMENSE BUILDING TO BE OCCUPIED BY WHITE AGENCY

Flanders, Velie, American Simplex, Parry, Anhut, Ohio and Empire.

Chicago is far behind the average metropolis in manufacturing strength, although it has been the hub of the motor buggy industry for several years. Now there are made here, besides the high-wheelers, the Falcar, Black Crow, Tincher, and Staver. Sears, Roebuck & Co., the big mail order concern, is planning to produce high-wheelers in enormous quantities and sell them through the medium of Uncle Sam and his postal service. The Holsman is well established with its pioneer rig, while the International Harvester Co. is a big factor in the motor buggy line. A newcomer is the Ideal electric, which is being made here.

Chicago's Taxicab Service

Chicago's taxicab service has increased 200 per cent in the past year, but despite this increase it is declared by those in this branch that none of the five leading concerns has declared a dividend, it being asserted there are too many cabs in service.

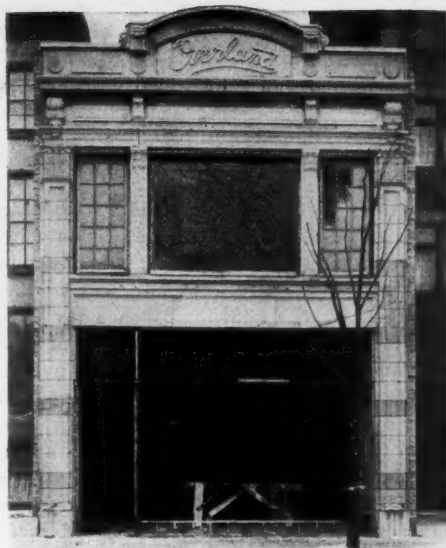
Walden Shaw has sixty and so has the Chicago Taxicab Co. The Auto Taxicab Co. has forty, the City Motor Taxicab Co. twenty-five and Owen Fay fifteen, while there are probably fifty free-lance cabs. But Chicago is not yet educated to the taxicab proposition. This ought to be a fruitful field, but somehow the traveling public seems to fight shy of calling into use the motor-propelled vehicles. The education will come in time, it is thought, and then taxicabbing will be a source of profit to the concerns engaged in it. But right now the people do not know that it really is cheaper to use a taxicab than a horse-drawn vehicle. A party of four can go 3 miles at a cost of \$1.20, whereas it cost \$1.50 per person for the other way. The taxicab rates here have been fixed at 40 cents for the first $\frac{1}{2}$ mile and 10 cents for each additional $\frac{1}{4}$ mile for one or four persons.

While nearly every garage in town handles supplies, as well as the big department stores, most of these goods come

from one of the eight big supply houses which are located in this city. The big eight, however, do not confine their entire attention to city trade, covering the country in all directions and doing a business that assumes formidable proportions when reduced to a matter of dollars and cents. A conservative estimate made of the total business done by these eight concerns for the past year places the figures at \$4,000,000, of which probably 25 per cent has been sold in the city. That Chicago alone can use \$1,000,000 worth of motor supplies in 1 year only goes to show the hold motoring has in this city.

The Commercial Situation

More phenomenal even than the demand for pleasure cars has been the advance made by the commercial wagons. A conservative estimate made places the number of business vehicles in use at the present time in the city of Chicago at from 350 to 400, which is almost twice as many as were in use at the end of 1908. Nearly every business concern of importance either is using motor-propelled wagons or is experimenting with them with a view to adopting them if they can be convinced of their utility. Particularly strong is the motor truck in the stock yards, where at least eight of the big packing houses have adopted them, it being estimated that there are from twenty-five to thirty big trucks in use in Packingtown. The department stores, too, have accepted the new means of conveying their goods from one part of town to another, and among the converts of the present year are the Fair and Hillman's, two of the biggest of their kind in the city. The daily newspapers also have been won over. The Daily News long has been a convert and has used two Lambert trucks with great success for several years, while in 1909 the Tribune awoke to the possibilities of the motor vehicle and put into service a 3-ton Packard, which is used between the hours of 12 o'clock midnight and 2 a. m. to carry papers to the whole-



BUILDING BEING ERECTED FOR OVERLAND

salers. The Examiner is using three Frayer-Miller trucks and is delighted with them, while the American has a fleet of Randolph light delivery wagons.

Thirty Makes in Chicago

In all there probably are thirty different makes of commercial wagons represented in Chicago, several of which, however, are newcomers, which are starting out with excellent prospects. Among the makes of heavy trucks represented are such well known lines as the Frayer-Miller, Packard, Reliance, Fairbanks-Morse, Gramm-Logan, Mack, Champion, Frontenac and Rapid, while in the lighter types there are the Randolph, Brodesser, Sternberg, Sterling, Firestone-Columbus, Holsman, Rapid, Monitor and Frayer-Miller. In addition to these gasoline machines there are several makes of electrics, among the users of which are such big concerns as the Commonwealth-Edison Co. and Case & Martin, the latter famous for their pie-making.

"While the present year has been an exceptionally good one, I anticipate an even greater advance in 1910," says C. E. B. Adams, of Adams & Engs, handling the Frayer-Miller locally. "All conditions point to that. The city streets have been improved to such an extent that motor wagons are no longer handicapped in this manner, while all big business houses are warming up to the proposition in a manner that is particularly gratifying to us. Those not using motor wagons at the present time either are experimenting with them or have expressed themselves as being willing to be convinced. The slow ones have been won over to our ranks by the progress made by their competitors and virtually have been forced into it. The business houses find that it is no longer an experimental proposition, but that motor cars can be operated cheaply, and in addition to that they are great time-savers. I should say that we have sold thirty-five Frayer-Miller trucks and delivery wagons this year and expect to do even better in 1910. So it is with all



SHOWING PROGRESS MADE ON LOCOMOBILE'S NEW BUILDING



FINISHED HOME OF MITCHELL AT SOUTH END OF ROW

our competitors, and it would not surprise me any to see between 700 and 800 commercial rigs running on Chicago streets at the end of next year."

Clubs Have Been Active

But Chicago has had time for things other than trade, and the review of the year shows that the clubs have been singularly active in the promotion of events tending to boom the industry. The biggest event on the calendar, of course, was the road-racing carnival of the Chicago Automobile Club, which was held at Crown Point, Ind., in June, when races for the Cobe cup and Indiana trophy were run. While this was not a money-making venture, the club made a reputation as a promoter that is second to none in the country. Not a single criticism was heard of the manner in which these events were run, and since last June the meet has been held up as a model of its kind.

The Chicago Motor Club, which usually holds several big events during the course

of a season, only promoted the annual hill-climb at Algonquin, which was, as usual, a big success. It had intended putting on its annual 1,000-mile reliability during the fall months, but ran up against a snag when it tried to induce the A. A. A. to allow it to use fixed penalties such as were demanded by the manufacturers. The motor club was in a dilemma. If it bowed to the will of the A. A. A. and accepted the A. A. A. penalization scheme it could not get the entries from the manufacturers, and if it got the entries it could not get the sanction. So the whole thing was abandoned for the year. Next year, however, the motor club proposes to make up for this by putting on its hill-climb and reliability, which will be national events, and also an economy test and a rim and tire event. Also it may introduce the novelty of hill-racing at Algonquin, where an artificial hill is to be constructed and made broad enough for two cars to go up abreast, thus making it a race.

Detroit Greatest Factor Of All



DETROIT, Mich., Dec. 21—Detroit motor car manufacturers and dealers have brought to a triumphant close a season of prosperity which so far surpasses that of former years as to simply dwarf them in comparison. From all parts of the United States and from foreign lands as well a stream of gold has poured into the coffers of the leading industry of Michigan's metropolis. Laborers have streamed hither from every direction. Detroit's wealth, prosperity and population have increased by leaps and bounds and there is none who denies the credit to the one gigantic industry that has brought it all to pass.

During the season of 1909 Detroit factories produced in the aggregate a total of 44,200 motor cars, more than double the 17,161 of 1908. And, in spite of this tremendous increase in output, the great marts of the world gobbled them all up and begged for more. From the high-powered touring car to the light runabout, the entire output was sold long before the factories had ceased the production of the 1909 models and had changed to the latest creations of their engineers and designers, as embodied in the 1910 models. Prominent manufacturers estimated that, had the local factories been enabled to double their output it would still have been too small to satisfy the demands made on the distributors by the buying public.

Everybody Enlarging

As a result, there is not a factory which, long before the season was over, had not already started enlargement for the year to come. New factories have been built for the veteran manufacturers' occupancy and new firms have been incorporated to swell the output for 1910. Hardly a week has passed during the closing stages of the season that has not been marked by the announcement of the organization of some manufacturing enterprise allied to the trade. Most important of all was the formal statement of the purpose of the General Motors Co. to establish on property quietly purchased in the east side manufacturing district by far the largest factory in the industry in the world—a monster structure with a floor area of 100 acres and to cost in the neighborhood of \$2,500,000.

The number of cars which will leave Detroit factories during 1910 is impossible to predict. But it will be limited solely by the ability of the manufacturers of parts. The shortage may come in the inability of the manufacturers of wheels to meet the demand. There may not be enough crankshafts to go round. It is possible that the makers of bodies will be the first to hang out the signal of distress. Other depart-

By Paul H. Bruske

ments of manufacture may show weakness which will be fatal to those manufacturers who do not supply this part from their own plant.

Estimates for Next Year

Estimates on the 1910 output range from 100,000 to 140,000 cars. After a close canvass of the factories, the writer inclines to the belief that there are facilities for the production of very nearly 125,000. Just how close the figure comes to actual realization will depend entirely on the circumstances mentioned above, provided no sudden financial flurry changes the conditions of the market.

The year has been signalized by the advent of the professional promoter in the field of the industry. Detroit has had one or two prior instances in which factories were organized on paper and stock sold to unsuspecting purchasers who eventually found themselves contributors only to the prosperity of the company promoters. These instances have been isolated, however, up to the last 3 months. The prosperity of the industry universally and the announcements of tremendous profits which have featured the year have made the opportunity a golden one during the past fall and winter, however. Reorganization of several companies before the producing state was attained and exceedingly doubtful facilities for performing the alleged purposes of others have combined to emphasize the danger that besets the man who may desire to invest. That even the tremendous wave of prosperity will be unable to carry along a poorly managed enterprise is a patent conclusion.

From this it should not be inferred, however, that by any means all the new local concerns are not prepared to carry out their pledges to their stockholders. The converse is the case. In most cases development work has progressed for months before any formal announcement of organization was made.

New Factories in Operation

No fewer than five factories organized during 1909 are now at work on their 1910 models and are producing strictly according to schedule, nor does this include the three active factories added earlier in the year which produced 1909 models now successfully in use. Several of the non-producing newcomers to the trade are now building new factories while others have purchased or leased space in which to make their cars.

The Ford Motor Co. was the largest producer of cars in Detroit in 1909. Favored by excellent contracts with the manufac-

turers of parts and with the 1909 model in such shape that no further experimentation was necessary after the early months of the year, the Ford company was further favored by the additional space provided by its immense new plant out Woodward avenue. Using the old Piquette avenue factory as a base and the immense new plant for storage and assembly purposes, the tremendous total of 17,500 cars was produced and sold. But one model with a variety of bodies was produced and this fact still further served the use of rapid production. With its enlarged facilities complete for 1910, Ford predicts an output of 25,000 cars, a feat which, if possible for any local manufacturers, is surely within the realm of the company which was the first to distinguish itself by the production of 10,000 light cars in 1 year.

The Everitt-Metzger-Flanders Co. was second to the Ford in numerical production, turning out 8,000 cars of the 1909 and 1910 models during the year. Most of these were marketed by the Studebaker Automobile Co., of South Bend, Ind., though the E-M-F recently has served notice on the South Bend firm that it will hereafter market its own product in spite of a contract that has still more than 2 years to run.

E-M-F's Army of Workmen

In 1910 the E-M-F will be the largest employer of labor in Detroit. Its prosperity in 1909 was made the basis of the purchase of five plants, all of which will contribute to the 1910 output. The most important of these purchases was that of the de Luxe company's plant on Clark avenue, which was abandoned by that firm on account of its failure to produce and find a market for its high-powered model. The de Luxe plant included an up-to-date brass foundry. With the announcement also came the news that the E-M-F had purchased a machine shop, a crankshaft factory and a body plant. The de Luxe factory was remodeled for the manufacture of a light 20-horsepower runabout to be called the Studebaker-Flanders and the other acquisitions were set to work on parts for the E-M-F and Studebaker-Flanders. A Canadian factory was established. The E-M-F now is employing 10,000 hands at its various plants and has mapped out a year in which it expects to manufacture 15,200 of the E-M-F 30 type and 25,000 of the smaller cars.

Third place in numerical production goes unquestionably to the Cadillac. Early in the season the stock of this firm was absorbed by the General Motors Co.—its first advent into the field of the industry in Detroit. The management of the factory remained, however, in the hands of H. M.

and W. C. Leland so the factory's original plan was carried out to the letter. At its two plants the Cadillac produced 6,000 cars of the four-cylinder 30-horsepower type, all of which found a ready market. In 1910 the Cadillac will market 10,000 cars and there are rumors of a substantial addition which will allow the firm to most materially increase its product in 1911.

The Chalmers-Detroit's big plant on Jefferson avenue, just outside the city limits, was worked to the utmost of its capacity all season, in spite of the progress of factory additions which have more than doubled the floor space of the plant. As in 1908, the Chalmers-Detroit made considerably more of its own parts than has been the general rule in Detroit. This will be even more noticeably the case in 1910, in which the factory expects to market 5,500 cars. Chalmers-Detroit's were in evidence all year in the field of competition, closing the season with a leading score. This fact is particularly noticeable in that no other Detroit factory devoted any systematic attention to the support of a racing team through the year.

The Packard Production

The Packard Motor Car Co. was virtually the sole producer of high-powered cars in Detroit in 1909. Retaining the same principle of concentration of energy which has been a feature of the Packard success since the inauguration of activity here, but two models were produced, of identical specifications, except in size. Production was considerably increased over 1908, the company producing 2,303 cars of the 1909 model, every one of which was sold before it left the factory. Large additions were made to the factory and, after characteristically thorough preparation, the production of a 3-ton truck was begun. The Packard now is adding a foundry to its immense equipment which is now the largest single plant for motor car production in Detroit. When the foundry is completed and in working order the Packard company will make virtually its entire car in its own factory, the lone exception being the tires. In 1910 the Packard company will build 3,300 cars, exclusive of trucks.

The Brush Runabout Co. produced 2,000 of its single-cylinder cars in 1909 and now has virtually completed a new factory out Woodward avenue, at which, in 1910 10,000 cars will be manufactured, the firm developing all its own parts with the exception of the tires and electrical equipment. The factory represents the view of Frank Briscoe, the president of the company, and is novel in many respects, most apparent of which is the fact that each department is housed in a separate building. All construction is of cement and steel, one-story and with saw-tooth roof.

A remarkable record was made during 1909 by the Hupp Motor Co., which entered the field early in the year, though too late to exhibit at the national shows. The firm had spent fully a year on its

development work and careful attention to advance detail made it possible to produce and market 1,500 cars of the light runabout type. During the year a fine factory was built for the firm on Jefferson avenue and was occupied without the loss of a day's time in production. These 1,500 Hupmobiles will be joined by 7,500 in 1910.

Hudson's Good Record

Similarly remarkable was the record made by the new Hudson Motor Car Co., which, though organized in the summer, nevertheless was able to start production and close the year with 2,000 Hudsons in the hands of their purchasers, with 5,000 more the designed output for the coming season. The Hudson was favored to a certain extent by the fact that it was able to secure the abandoned factory of the defunct Aerocar company, a large share of which, including the internal arrangements, was possible of use without material alterations. To a considerable degree the Hudson profited by the experience of the executives of the Chalmers-Detroit Motor Co. who personally were interested in the new plant and who gave its organization and development personal attention.

The Regal Motor Car Co. proved a most substantial addition to the local factories. In 1908 it had begun production on a small scale, but had mapped matters out systematically for 1909. The facilities offered by a portion of the large plant of the Clayton & Lambert Co. assisted in the production by the Regal of 1,200 cars in 1909. A new factory building was constructed this year, adjacent and communicating with the old plant. This has now been occupied by the firm, which will produce 5,500 cars in 1910.

Grabowski a Factor

The Grabowski Power Wagon Co. was a substantial contributor to the list of Detroit-made cars during 1909, building about 250 trucks of various models and having mapped out a production of 400 cars for 1910. Max Grabowski, originally prominent as the designer of the Rapid truck, but who left that concern in the deal which closed by the absorbing of that firm into the General Motors group, is the leading spirit of the Grabowski organization.

The Anderson Carriage Co., the one producer of electric cars in Detroit, scored a pronounced success with its 1909 models, of which 650 cars were marketed, of various types. The entire plant of the com-

pany, which was once one of the leading carriage manufacturers in the country, is devoted to the manufacture of the electrically-propelled motor vehicles and plans have been made for the manufacture of 1,500 cars in nine types for 1910, facilities having been increased by a large factory addition and the purchase outright of a concern at Cleveland, where the motors will be manufactured.

The Herreshoff Motor Car Co. completes the list of factories operated during 1909. The Herreshoff was occupied very largely in the year with development work, manufacturing but fifty cars on account of unforeseen obstacles. The factory management announces an output of 500 cars for the coming season.

Seven New Factories

Of the seven new factories which are already producing cars and making deliveries, the Studebaker-Flanders contemplates by all odds the largest numerical scope with the 25,000 light runabouts mentioned earlier in this article. Next in importance is undoubtedly the Metzger Motor Car Co., which has secured the Meier trunk factory building near Grand boulevard and the Grand Trunk tracks and is now busily producing the first installment of the Everitt 30 cars, a very considerable portion of which are being made under the firm's own roof. The leading exponents of the Metzger factory are William E. Metzger, Detroit's first motor car retailer, and prominent as the promoter of the city's early race meets and motor shows; B. F. Everitt, formerly president of the B. F. Everitt Co., body finisher, as well as president of the Wayne and later of the E-M-F factories, and William Kelly, one of the pioneer designers of Detroit, formerly at the helm of the engineering departments of the Wayne and E-M-F. These men disposed of their stock in the E-M-F and decided to start a factory of their own. Their initial move was to call in a select number of prominent retailers whose views they secured and then proceeded to manufacture a car along the line of the general consensus of opinion. The retailers who participated in the original conference divided the allotment of 2,500 cars of the 1910 model among them. The factory will finish this run June 1, according to schedule, after which the organization will be shifted to work on the 1911 model. Production is conservatively estimated at 5,000 cars for the calendar year.

Another new factory which already has



DETROIT STATISTICS

Wholesale			
Producing factories throughout the year	11	Agencies lapsed	2
Factories added during year	5	Agencies merged	2
Factories lapsed	1	Agencies added, start with 1910 models	10
Factories removed	1	Lines added	14
Cars built	44,200	Lines dropped through 1909	3
Factories now producing 1910 models	16	New garages built and under construction	13
Factories building	4	State and district agencies now operative	22
Factory estimate of 1910 output	126,400	Factory branches	13
Retail		Cars sold in 1909, Detroit and eastern Michigan	2,491
Agencies operative through 1909	28		
Lines handled through 1909	41		

its demonstrators at work in many cities of the country is the Krit Motor Car Co. In this firm the leading spirit is Kenneth Crittenden, formerly with the Ford Motor Co. Mr. Crittenden designed the car and interested the capital in the firm, and is already producing cars at a rate which justifies the claim of the intended production of 1,000 1910 models four-cylinder 20-horsepower cars. Another assured 1910 new producer is the Demotear Co., which is now producing the first run of what is designed to be an output of 3,000 two-cylinder runabouts. The new Warren Motor Car Co., with Homer Warren, postmaster of the city of Detroit, in an influential role, has production well under way of 500 1910 cars.

Other Plants Located

In addition to these factory space has been secured by the Page-Detroit Motor Co., the Anhut Motor Co., the Beyster-Thorpe Motor Co. and the Michigan Motor Co. A well-backed concern, the Abbott Motor Car Co., has purchased the real estate and started construction of a factory on the east side. The Fairview Motor Co., under which firm name the stockholders of the Chalmers-Detroit will manufacture trucks, has a fine new factory under construction adjacent to the plant of the Chalmers-Detroit. The Welch-Detroit Co. and the Owen Motor Car Co. are other new concerns that are awaiting the starting gun the first of the year.

The increase in the number and scope of the motor car factories has been paralleled by the growth of the manufacturers of parts and accessories. Among the prominent additions to the facilities in this line is the new McCord Mfg. Co., a branch of a large Chicago concern, which will manufacture 75,000 radiators during the coming season. The new Timken-Detroit Axle Co. in the Clark avenue district, which it is claimed will manufacture about 75 per cent of the rear axles used in the construction of high-grade cars in the country, is another. Both these concerns have constructed new factory buildings for their use. The Autoparts Mfg. Co.'s new factory has a capacity of 500,000 parts a year, and is swamped with orders. The K. H. Wheel Co., organized in 1908, has materially increased its capacity and is now prepared to furnish 75,000 sets of wheels for the 1910 trade, all of which have been sold under contract some time ago.

Many firms which have been manufacturing parts and accessories as a side line have gone into the business exclusively for 1910, and this in spite of the fact that many of the motor car manufacturers have added greatly to the proportion of their cars manufactured under their own roofs.

55,000 in the Industry

In all probability a conservative estimate of the men deriving their sole income from the motor manufacturing industries of Detroit would be in the neighborhood of 55,000, while the capital invested in the manufacture and sale of cars, parts and

accessories will now total close to \$50,000,000.

No casualties marked the progress of the industry through 1909. But two factories were lost, one of them the de Luxe, which sold its plant and machinery to the E-M-F, the other the Blomstrom, which removed its center of activity from Detroit to Adrian.

The year was notably free from labor difficulties, all the local industries being firmly founded on an open-shop basis. In spite of the tremendously increased scope of the industry, the supply of labor has surprisingly kept up with the demand. While the chief difficulty of the average manufacturer still is a supply of hands to man the machines thousands of workmen have been moving their families to Detroit during the year, the influx just about keeping pace with the increased demand for men. In addition large numbers of young men have gladly accepted positions in the shops of the various companies, to become familiar with that end of the industry before embarking in the selling and manufacturing departments for themselves. This has done much toward raising the grade of help throughout the industry locally.

Retail Trade Reviewed

With the manufacturers setting so giddy a pace, Detroit's retailers have had all they could do to retain a similar proportion of gain. The ratio of increase was not materially different, however. The factories built more than twice as many cars as in the preceding year; the retailers sold more than twice as many cars as they had in 1908. The retailers, too, were limited in their feats solely by the lack of cars allotted by the respective firms represented.

A total of twenty-eight retail firms competed for the 1909 trade of Detroit and eastern Michigan. A general estimate of 1,200 cars passed out of the local distributors' hands in 1908. In 1909 the figure, according to a carefully taken census, totalled 2,491. Quite a few of the local firms enjoyed rights to state territory and several comprised a selling district of even larger dimensions. But Detroit herself snapped up the lion's share of it all.

Though nearly all the standard makes of electric cars were handled in Detroit during the season, the local popularity of the Detroit electric made it very hard sledding for the others. The local branch disposed of seventy cars in 1909 and added a handsome garage to its equipment. This structure was placed on East boulevard, very near the Belle Isle bridge approach. It was used solely for repair work and as a charging station, though under Manager Kirsten of the Woodward avenue branch, where the local sales department is located. The Rauch & Lang and Woods were close up in the contest for second honors.

The Auto Commercial Co., a newly-formed organization, handled the output of the Grabowski Motor Vehicle Co. for

Michigan and Wisconsin, disposing of fifty cars. A large part of the local sales were made on account of the willingness of the firm to provide garage room and care for the cars—an enterprise which worked out most successfully, repair and other work on the cars being done at night and the cars kept in running order for the regular drivers who came to take them out in the morning. In the neighborhood of forty Rapid trucks also were disposed of through the local factory branch.

In no year in the history of the industry has there been an evidence of preparation similar to that now in force among the local dealers for 1910. It is the general consensus of opinion that the sales of the coming season will exceed by from 40 to 50 per cent those of 1909. Most prominently is this feeling of optimism manifest in the increase in the number of local distributors and the lines handled. Where forty-one makes of cars contended for supremacy during the year that is dying, fifty-three will be in line for 1910, with thirty-eight dealers in the field. A total of thirteen new garages with salesrooms in connection have been built during the year, the finest being those of the Anderson Carriage Co., the J. H. Brady Auto Co. and the Olds Motor Co. The list of new distributors who started their years with 1910 models includes the following, with lines appended: Gillespie Auto Sales Co., Reo and Thomas; Neal Kitchel Auto Co., Parry and De Tangle; Bemb Auto Co., Palmer-Singer; Frank Craig Auto Co., Abbott; Broadway Auto Co., Haynes; J. H. Cox Auto Co., Petrel; Security Auto Co., Everitt 30; P. W. Schulte & Co., Kissel; Detroit Motor Sales Co., Keystone, Page-Detroit and Warren; Harper & Aldrich, Demot. Virtually all of these firms will occupy new garages, the plans of the structures intended for the Security Auto Co. and the Craig being particularly elaborate.

In general the movement out Woodward avenue, begun two seasons ago, has been continued. The tire and accessory dealers have been crowding together on three blocks of Jefferson avenue, where once the dealers in cars virtually held full sway.

Events of the Year

Five momentous events marked the year 1909 in Detroit, these being in chronological order the second show of the Detroit Automobile Retailers' Association, the annual tour of the same organization, a race meet at the Grosse Pointe track, the start of the Glidden tour and the formation of the Detroit Motor Club.

The show was the first held in the new Wayne gardens and generally was credited with being the most artistic and representative exhibition held during the year, outside of New York and Chicago. It scored a marked financial success and furnished a fitting opening to the season's sales activity. The exhibition will be repeated under the same auspices the week of January 24, 1910.

Cleveland Makes Many Cars



CLEVELAND, O., Dec. 21—A notable increase in the motor car industry of Cleveland has been made during the past year as evidenced by a gain of 16 per cent in the number of selling agencies and dealers. With forty-three regular selling agencies and branches a year ago, Cleveland now has a round fifty separate concerns selling motor cars at retail. Thirteen of this number are new during the year and six of those dealing in cars in a smaller way earlier in the year have gone out of business leaving a net gain of seven.

Of the selling houses here last year four of them were branch houses and four new branch houses have been added since then, not counting the local selling departments of the eight Cleveland factories. These mere additions in number of selling houses do not indicate the full growth of the industry here, for many of the older concerns have multiplied the size of their business quarters. One of the older agencies has gone into a new building with eight times its former floor space, another has moved to a store three times the size of that formerly used, and another has added 75 per cent to its space occupied. One of the older branches has a new garage and salesroom of one-third more capacity almost ready for occupancy. Yet another has a room almost ready to occupy which will double its space. Of the new agencies, three of them occupy immense specially built quarters with concrete floors and ceilings and are handling cars for much territory out of the local field.

A year ago there was a movement of the motor selling houses to Euclid avenue, between East Twelfth and East Twenty-second streets. During this year there has been a marked building up of motor business and a movement from other scattered localities to upper Euclid avenue, from East Fifty-fifth street to East Seventy-first street, and this district now has nearly a round dozen salesrooms occupied and nearly ready for occupancy by motor car houses.

Cleveland now has seven factory branches of the tire manufacturers, one of the largest having been added during the year, the Firestone, with a large double store and basement. In addition there are seven other separate tire agencies here doing a large business.

There has been no noticeable additions to the number of accessory and supply houses, but the seven supply houses here

By Will S. Gilbert

have all grown in size of greatness and evident additions to lines handled.

New buildings for garages in the outlying districts of the city have been numerous in addition to the increase of garage facilities by the downtown sales houses. The number of cars sold from Cleveland during the 1909 season by the fifty selling houses reached the grand aggregate of 2,000 cars, not counting the output of the Cleveland factories sent to other localities; it does include, however, in several cases cars sold by Cleveland agents through down state sub-agents in territory tributary to Cleveland. A careful estimate of the number of cars contracted for by these fifty Cleveland agencies and branches for the 1910 season foots up to over 5,000 cars, large and small, and to the fulfillment of these expected sales depends, in the estimate of the dealers, only upon the ability of the factories represented here to deliver what has been contracted for. In many cases the allotments have been one-third to one-half sold to customers and in a few cases practically all has been ordered and deposits received by the local dealer.

Bison Trade Thriving



By J. A. McGuire

BUFFALO, N. Y., Dec. 20—Speaking broadly, and yet without the slightest exaggeration, the motor car industry and its ramifications, such as supply houses, accessories and tire departments, are in a prosperous and most thriving condition, with every promise of flourishing beyond the expectations of the fondest interested party. A visit this week to the different motor car plants, salesrooms and supply houses elicited the frank and conservative information that the industry, speaking generally, was most satisfactory. Plain, cold facts, shorn of embellishment, were produced as the best argument in substantiation of the utterances of manufacturers and dealers.

The various institutions associated with the motor car industry in Buffalo substantiate the argument of good trade. There are a total of twenty-five salesrooms in Buffalo. This is an increase of one-third, or eight salesrooms, over the number that existed in 1908. The total number of branches is not large, yet the institutions are commodious and their respective sales are splendid. These branches are the Ford, Pierce, Franklin, Buick and Maxwell, five in all. This is but an increase of only one over 1908, the Franklin branch being established during the year just

ended. The grand total of selling places is fixed at the number of salesrooms, or twenty-five.

There are nine tire houses in Buffalo at present. This is an increase of one over the number that existed in 1908, the Republic being the newcomer. The total number of supply houses is seven, which indicates but an increase of only one supply house during 1909, the Becker-Wickser Co. entering the field after many years' attention to the demands of the harness business.

During 1909 only one new salesroom has appeared, and it far removed from the business section of the city. It is located at 1633 Genesee street and operated by J. B. Schmidt. It is conservatively estimated there are fifty public garages in Buffalo. No new ones have been erected during 1909. There are a large number of private garages in Buffalo. It is rather hard to estimate the exact number, but Dai H. Lewis, secretary of the Automobile Club of Buffalo, says that probably one-third of the motor car owners of Buffalo have their own garages. The more wealthy class have some handsome stone and brick garages, while the more moderate class of business man is contented with a small frame structure in the rear of his home, sufficiently large enough to accommodate his machine. In this connection it must be remembered there are no fewer than 4,000 motorists in Buffalo owning their own cars.

A sort of a row was established in Main street, between Tupper and Edward streets, some years ago, but the extension stopped right there. The agents could get no more buildings in that business section of the city. Now new institutions coming in are compelled to select the best site obtainable for their homes. This means that the newcomers are being scattered. In the far eastern end of the city one new institution has sprung up in the sales line, and there is one going up in Black Rock, the western extreme of Buffalo.

A conservative estimate of the cars sold in Buffalo is placed at 800 for the year 1909. Orders are now in for 1910 cars, and the number of sales for the coming year will double that of this. While the 800 cars simply applies to Buffalo it does not mean that this number is all that was sold by the local agents. The houses here cater to adjacent territory and care for western New York towns such as Niagara Falls, Tonawanda, Lockport, Dunkirk, Batavia and intermediate points. The number of cars sold throughout this territory, including Buffalo, would, therefore, be much higher. No correct estimate of the number of cars sold in western New York is obtainable.

CLEVELAND STATISTICS

Cars sold	2,000
Retailers	50
Branch houses	16
Tire branches	7
Tire agencies	7

BUFFALO STATISTICS

Salesrooms in Buffalo	25
Branches	5
Tire concerns	9
Public garages	50
Cars sold in Buffalo	800

Big Year Ahead For New York



NEW YORK, Dec. 20—Unless we have a long, wet spring and all signs fail, the coming season will be the biggest ever on Broadway. New York's row stretches out longer and longer and rises higher and higher with each year that passes, until now real skyscrapers of expensive steel skeleton construction and ornate architectural effects are taking the places of former one and two-story bricks as the salesrooms and headquarters of motor car and tire houses.

Among the more conspicuous examples are the new B. F. Goodrich Co. twelve-story building near Broadway and Fifty-seventh street, completed last September and wholly occupied by the company for the selling and handling of its tires and rubber goods of various sorts; the A. T. Demarest & Co. nine-story building, occupying the southeast corner of the streets named and utilized as repository and sales offices for the company's fine body-building business; the Peerless Motor Car Co.'s nine-story building adjoining the Demarest building on the south and of similar architecture and fireproof construction, and the Dayton Motor Car Co.'s eight-story structure on Fifty-seventh street just off Broadway and connected with the Goodrich building that fronts on Broadway. The last-mentioned structure is occupied both by the manufacturers of the Stoddard-Dayton cars and by their distributing agents, the Atlantic Motor Car Co., as sales and storage rooms. The Demarest building has 63,000 square feet of floor space and the Stoddard-Dayton building a floor area of 40,000 feet.

These newest examples are cited by way of showing the development of the Broadway retail trade in motor cars and accessories and calling attention to the concrete expression of the confidence in the permanence of the business entertained by long-established manufacturers who have been extensively engaged in other lines of business before the birth of the motor car and accessories industry in America.

Activity of Winter

The row shows its usual activity this winter, and that means that it is the liveliest 2 miles of business street in America, an aspect contributed to in a great measure by the hundreds of motor cars of all kinds running ceaselessly up and down the wide thoroughfare at a lively gait and by the many persons dropping into the salesrooms bent on various errands. It is not inappropriate that the row passes through the heart of the theater and hotel districts which contribute their share of the life both by day and by night. One may say that New York's row never sleeps.

Early every winter there are numerous changes in the row. Agencies change

By Harry W. Perry

hands, branch houses are established, companies move from one location to another and old firms are dissolved and new ones make their advent. This winter is no exception. On the store windows one finds painted the names of new cars—the Hupmobile, Croxton-Keeton, Hudson, Randolph, Ohio, Hought, Mercer, Velie and Paige-Detroit. One finds, too, that new branch houses have been established by the manufacturers of the American, Acme, Columbia, Jackson, Simplex, Thomas and Midland. Most of these were represented before by local agents. Other agencies that have recently changed hands are the Marmon, now handled by the Sidney S. Bowman Auto Co.; Welch, by the Buick Motor Co.; Inter-State, Standard and American Simplex, by George C. John; Overland and Marion, by Reiss & Co.; Velie and Speedwell, by the Garland Motor Car Co.; Selden, by the Selden Motor Co.; Elmore, by the Post Motor Co.; Hudson, by A. E. Ranney & Co., and the E-M-F by the Studebaker Automobile Co.

The new line-up of branch houses and agencies of both American and foreign cars, as just compiled by Secretary Walter R. Lee of the New York Automobile Trade Association, will no doubt be of great interest to thousands who have friends in the New York trade or are interested in the makes of cars represented here. It is observed that there are some omissions, as, for instance, the Hewitt Motor Co. and the General Vehicle Co., which manufacture motor trucks right here in New York and Brooklyn. Perhaps, however, the list does not aim to include makers of commercial vehicles.

Foreign Car Representation

There has been a notable decrease during the year in the number of foreign cars represented in New York, as shown by the list. It is of interest also to observe that some of the best agencies have gotten into the hands of the fine body-builders; Brewster & Co. have the Delaunay-Belleville, A. T. Demarest & Co. the Itala and J. M. Quinby & Co. of Newark the Isotta-

Fraschini. Where in former years the business of importing and selling foreign cars was generally conducted under the name of one or more individuals, it is now customary to give the agency the name of the car, as the C. G. V. Import Co., the Fiat Automobile Co., the de Dion-Bouton Selling Branch, and so on.

The difficulties of compiling a complete and accurate census and list of agencies, branch houses, tire depots and supply houses for Greater New York are very great. Several hundred square miles of territory and thousands of miles of streets are embraced, making a personal canvass out of the question, and changes of all sorts occur so frequently that it is all but impracticable to get complete and reliable returns by a mail canvass.

The lists compiled by the Automobile Trade Directory, which are recognized as furnishing the most reliable information and are being constantly revised with the most carefully obtained information, show that there are now doing business in Manhattan 119 dealers in motor cars, 115 garages that do not have any agencies for the sale of cars, and forty-three dealers in supplies. Similar figures for Brooklyn are: Dealers, who may or may not maintain garages, 45; garages, not selling new cars, 69, and supply dealers who neither sell cars nor maintain garages, 10. This gives a total of practically 250 places in the two boroughs where cars can be bought or stored, or both. Some idea of the difficulty involved in keeping such a list up to date may be gathered from the statement that, as a result of some change, either in ownership, name, composition of the firm or of location of place of business, no fewer than 132 names were taken out of the list and 142 names added to it during the last 12 months. It is believed that there are more dealers and garages than appear on the list, but they are small and obscure, since repeated letters accompanied by blanks to be filled in with information failed to elicit any information or to be accompanied by any evidence of a bona fide business.

Tabulating the Sales

It is still more difficult to obtain even approximately accurate information relating to sales of cars in the city, since none of the associations consider it a part of their functions to gather data of this na-

CENSUS OF NEW YORK TRADE* MANHATTAN

	1909	1908
Branch houses of American car factories.....	43	30
Agencies for American cars.....	30	
American cars represented.....	73	70
Local manufacturers of complete cars.....	4	
Agencies for foreign cars.....	20	
Foreign cars represented.....	21	30
Total number of dealers, including branch houses.....	119	130
Total number of garages, separate from agencies.....	115	120
Dealers in supplies, not including garages.....	43	33
Manufacturers of bodies.....	15	
Manufacturers of lamps.....	10	

*Note—In this compilation a dealer who also conducts a garage is counted only as a dealer, and a garage that also sells supplies, only as a garage. Supply dealers neither sell cars nor maintain garages.

ture and there is no official source of information except the registrations with the secretary of state at Albany. From these registrations the manager of the Automobile Trade Directory, Inc., who has his place of business in the center of the motor car district and keeps in close touch with the condition of trade as indicated by sales, new agencies and garages, etc., estimates that 17,000 cars have been sold in New York this year and that 19,200 will be sold up to November 6, 1910, or presumably not fewer than 20,000 by the end of the year, since more than 700 were registered from this city between November 6 and December 6 this year. The registrations from New York city, he says, run almost exactly and constantly at 50 per cent of the total registrations for the state. The figures as given relate only to new cars. In addition, there were sold up to November 6—upon which date the last estimate was compiled—4,765 second-hand cars; doubtless by the end of the year the number will have reached more than 5,000.

Dealers in the city, including branch houses, already have contracted for approximately 20,000 new cars, it is asserted, and it is believed they will be sold unless some unforeseen development prevents.

New York's Motor Strength

There are now 692 agencies and garages of all sorts in Greater New York, according to the motor lists. These include all branch houses and local manufactories of pleasure and commercial cars, all dealers in new and second-hand cars, and all public storage places for cars, but do not include the manufacturers and jobbers of sundries. This total represents a general increase of about 10 per cent over last year. There have not been many new garages opened, notwithstanding there is a constant demand for more storage facilities to take care of the increasing number of cars. The reason for this is that nearly all of the available places suitable for public garages, such as large livery stables, were taken up in Manhattan and the congested parts of Brooklyn several years ago. Now the only new establishments coming into the field are those built especially for garage purposes at heavy expense, usually of steel and concrete construction in the Broadway section and of cement blocks or brick in the outlying parts, as in Harlem, the Bronx, the Flatbush and East New York sections of Brooklyn, and in Queens

Many New Buildings Erected



borough and Staten Island. In Manhattan, or New York proper, there are forty-eight manufacturers and jobbers of sundries, and in Brooklyn six.

Great Motoring Activity

The importance of New York as the center of the greatest motoring activity in the country—probably in the world—is recognized by the tire manufacturers, for every one of any consequence maintains a branch house or depot here. There are no fewer than thirty-eight such tire houses and depots, of which five are new during the year now closing. The more important of the new ones are the salesrooms opened by the Akron Rubber Tire Co., the New Jersey Car Spring and Rubber Co., and the Ruthford Rubber Co. In addition to these branch stores, there are seventy concerns that deal in tires only; that is, tire repair depots that supply new tires as well as vulcanizing and retreading old ones but which do not handle a general line of sundries and supplies.

Body-building is the largest manufacturing industry carried on in New York in connection with the motor car business. There are a dozen companies that make an exclusive business of building fine wood or aluminum bodies and three that build bodies in connection with the manufacture of radiators, hoods and similar metal parts. J. M. Quinby & Co., in Newark, one of the largest body-builders in the country, may almost be said to be of New York, as the largest part of its trade emanates in the metropolis and is for New York owners. All of these body-builders are very busy now, having more work in hand than ever before at this season, and with limousine and other closed bodies of the highest grade selling at prices often running up to or over \$1,000, the total turnover in a year by all these shops amounts to an enormous aggregate.

Probably the next most important manufacturing line carried on in New York as a branch of the motor car business is that of making acetylene, electric and oil lamps. There are ten such companies, with R. E. Dietz & Co. at the head. There are also eight manufacturers of tires, most of them being of special kinds, such as

leather-covered non-skid tires, non-puncturing tires, spring cushion tires and racing tires. The manufacture of tops, seat cushions, curtains, radiators, hoods, tanks, and other fittings or parts is also carried on to a considerable extent in New York, which city is not usually considered in connection with the motor car manufacturing industry. These establishments always are kept busy to their full capacity throughout the manufacturing season and often during the entire summer.

Taken altogether, the industrial situation in New York as it relates to the selling of cars and the manufacture and sale of parts, fittings and supplies, is very good and the outlook most pleasing for another prosperous year, with a larger total volume of business than ever before.

The Sporting Angle

Outside of the trade, New York has not distinguished itself by its activity in other lines. In comparison with other cities approaching it in size and importance, there have been few sporting events of note—no big reliability runs such as other towns have held with great success although it must be confessed the Gothamites certainly did spread themselves last spring when they held their annual carnival week, which was featured by an economy test in which participated many leading makes of cars and the results of which redounded to the credit of the motor car industry as a whole. Also in connection with this carnival week was the Fort George hill-climb which rapidly is becoming a fixture of note in the motoring world.

After this carnival week there came a big gap of inactivity and it was not until this fall that New York was heard from again in the sporting sense. Then came the revival of the Vanderbilt cup race, an eleventh-hour revival, which resulted in a road meet which was a credit to its promoters and which again returned an American car the winner of the classic.

Again New York was heard from this month when another hill-climb was held in its suburbs, the Fort Lee effort, which, however, was somewhat marred by having to be run in sections, the crowd interfering the first time and causing the second half of the program to go over for a week.

Of course the two shows last winter were successes as usual. Both the palace and garden affairs were larger than their predecessors, the feature of the two shows being the elaborate manner in which the two buildings were decorated. The public also howed its interest in such exhibitions by turning out in such numbers that the record for attendance was beaten. Looming up immediately ahead are the shows again, this time being so close together as to make it almost a continuous affair.

CENSUS OF NEW YORK TRADE MANHATTAN

Manufacturers of tires.....	8
Manufacturers and jobbers of sundries.....	48

BROOKLYN

Dealers in complete cars.....	46
Garages, not including agencies.....	69
Supply dealers, not including agencies and garages.....	10
Manufacturers and jobbers of sundries.....	6

MANHATTAN AND BROOKLYN

New cars sold.....	17,000
Second-hand cars sold.....	5,000
Branch tire houses and agencies.....	58
Dealers in tires only.....	100

40
60

7,340
1,800
33

Quakers Show 30 Per Cent Increase



PHILADELPHIA, Pa., Dec. 20—A composite response from local branch managers and agents to the query: "What was the result of the trade of Philadelphia during the past year?" could be boiled down into: "A general increase along all lines—approximately averaging 30 per cent—which would have been much larger but for inability to secure cars." A careful estimate, based upon personal queries to branch-house and agency managers, shows that about 3,100 cars were disposed of for use in the Philadelphia district, as against 2,400 last year, while if cars which reached their market through the various distributing branches here are to be included, an addition to the above estimate of from 1,200 to 1,500 cars would err, if at all, on the side of moderation. Such concerns as the Ford, Buick, Maxwell and Studebaker have made Philadelphia a distributing center for territory including, in the majority of instances, eastern Pennsylvania, southern New Jersey, Delaware and portions of Maryland, Virginia and other states, and this district is rapidly becoming one of the best in the country.

Six and a quarter million dollars is a conservative estimate of the value of the cars sold in Philadelphia up to the first of December of the present year, to which might be added an additional million and a quarter if the cars distributed through this center be included.

New Concerns Come In

The increase in the number of concerns carrying on business has been responsible for some of the increase in total sales, it is true, but almost without exception the representatives of the better known cars sold out their 1909 allotments early in the year, and many of them already have made deep inroads into their 1910 stock. Following the boom which came in with November, 1908, these allotments were invariably materially increased, and the month of May found many of the local agents and some branch managers worrying the factory for "a few more."

The experience of the Foss & Hughes Co., Pierce-Arrow agents, is a case in point. Archie Hughes declares that inability to secure cars lost his concern the sale of at least eighty-five machines. His allotment of 1909 cars was 140, and last March he issued a standing order to Pierce agents throughout the country to take any new cars off their hands at 5 per cent off list price. Of 1910 cars his quota is 168, he could dispose of 250. To keep office and shop forces employed during the slack times enforced by scarcity of cars the firm began early in the fall to devote its energies to gathering in all second-hand Pierce cars it could get hold of, fixing them up and selling them at a fair profit over

By George M. Schell

outlay. Twenty-eight Pierce cars of various vintages have thus been disposed of up to date.

President Percy Neal, of the Automobile Corporation, which handles the Peerless and Cadillac, disposed of sixty-five of the former and seventy-five of the smaller cars—an increase of 60 per cent over last year's business. Shortly after January 1 ground will be broken for the corporation's big new six-story concrete building, which will cost in the neighborhood of \$350,000.

The increase of business in the smaller cars was especially marked during the year. The Buick branch, which is the distributing depot for eastern Pennsylvania, southern New Jersey, Delaware and part of Maryland, with twenty-eight agents, retailed 215 cars in the Philadelphia district proper and placed 575 wholesale through the twenty-eight agents. The increase of strictly local sales over last year is a trifle over 100 per cent.

Big Ford Business

The Ford branch, which also is the distributing center for practically the same territory placed a total of 812 cars, of which 184 were retailed locally—the latter an increase of 68 per cent over last year. In percentage of retail to wholesale business the Philadelphia depot leads every Ford branch in the country.

The Maxwell was branch-ized too late in the season to secure a basis for comparison with last year, but the total of about 275 cars placed in Philadelphia and the eastern section of Manager W. F. Smith's territory is a creditable showing for half a year. The territory already has made a big hole in the 425-quota of 1910 cars assigned it.

Similarly optimistic reports were received from practically every branch and agency manager interviewed. The dearth of the more popular cars worked to the advantage of the less desirable makes. The enthusiast who could not get what he wanted took what he could get, if only for a makeshift, meanwhile putting in an early bid for a 1910 model of the car of his choice.

One feature of the local business which shows an especially marked improvement over last year is the commercial vehicle end. Last year business rigs were a comparative rarity on the streets of Philadelphia; now there are in the neighborhood of 150 vehicles of various descriptions doing their daily business stunts. Of these the large majority are, of course, light deliveries; and of this latter branch of the business the Autocar Co., by reason of its propinquity to the Quaker City, has the inside track. Not fewer than sixty Auto-

cars of the 18-20-horsepower variety, of either 85- or 97-inch frame, are bustling about Philadelphia—especially suburban Philadelphia—every business day.

Popular With Brewers

The big local breweries and the paper mills have monopolized the heavy trucks, which are almost entirely of the electric pattern, although the Packard company has effected an entrance into the trade during the year by placing four of its 3-ton gasoline trucks, two of them with John Wanamaker.

There are several Reliance vehicles doing daily sight-seeing work; a few Knoxes and Cadillacs, and one or two nondescript made-overs; but the Autocar has a strangle hold on local commercial vehicle business; the local branch house is devoting 75 per cent of its efforts to exploiting that line.

The electric situation has undergone a marked improvement with the advent about a year ago of J. C. Bartlett, local Woods electric agent. A live campaign of publicity, included in which were the establishing of a single-charge record from Philadelphia to Atlantic City and return, and a trip to Pittsburg and return, woke up the natives to the possibilities of the electric, judiciously handled. As a result not only have fourteen new Woods vehicles been placed during the last 10 months, but owners of electrics which had been relegated to the limbo of forgotten things have resurrected their antiques and, with the assistance of the experts at the Bartlett 24-hour-a-day garage and charging plant, with a capacity of seventy-five cars, they have begun to realize upon what had long looked like a lost investment. This recrudescence of the electric here is really one of the most striking features of the local motor vehicle proposition, and shows what can be done with that class of vehicles under intelligent direction.

Branches and Agencies

Philadelphia's fifty-five branch houses and agencies now represent a total of seventy different makes of cars, a net increase over last year of twelve. This total does not include the Thomas and Marmon, which although just now unrepresented here, will be, it is understood within a short time.

There is an increase of three in the number of branch houses in Philadelphia over that of last year. The Oldsmobile was agency-ized and transferred to G. Hilton Gantert; the Fiat was similarly taken over by the Bergdoll Motor Car Co.; and the Grout branch was discontinued. To replace these the Packard, Apperson and Stoddard-Dayton all have been changed from agency to branch-house representation and two new ones—the Palmer &

Singer and the Kline-Kar—were added to the list making fifteen in all.

Up to December 5 the year 1909 had witnessed a net increase of nine in the total agencies doing business in Philadelphia there being thirty-seven concerns now representing the product of factories on the agency basis. There will surely be three additional agencies established here by January 1 which makes a grand total of forty agencies. Among the newcomers, omitting those cars where former branch representation was succeeded by agencies, are the Olds-Oakland Co. of Pennsylvania, Oldsmobile and Oakland; the Motor Co., Premier; Motor Supplies Co., Empire; Frank Fanning, Mercer; Selden Motor Car Co. of Pennsylvania, Selden; Hoopes Motor Co., Rambler and Crawford; Continental Motor Car Co., Speedwell and Parry; Wayne Davis Automobile Co., Everitt 30; Penn Automobile Co., Paterson 30, and J. C. Parker & Sons Co., Detroit electric.

The past 2 months especially have witnessed such multitudinous changes in the representation of even many of the better known cars that it would take a trained annalist to keep track of the kaleidoscopic swaps. The Pennsylvania was transferred from the West-Stillman Co. to J. M. Quinby & Co.; the E-M-F from the Foss-Hughes Co. to the Studebaker branch; the Oldsmobile from the Olds Motor Works branch to the Olds-Oakland Co. of Pennsylvania, which also took over the Oakland from the Auto Accessories Co. The Longstreth Motor Car Co. annexed the Alco, formerly handled by the Auto Accessories Co., and the Pullman, which was represented by L. E. French. The Chalmers-Fanning Co. has been succeeded by the Chalmers-Motor Co., with George W. Hipple taking Frank Fannings' place as manager of the Chalmers-Detroit agency. The Hamilton company, which formerly handled the Stoddard-Dayton, has been succeeded by the Stoddard-Dayton Auto Co. of Philadelphia, which has added the Courier to its line. W. J. Sprankle has taken the Marion to complete his line. The Apperson car is now represented by a branch house, succeeding the Philadelphia Auto Co., former agents. The Maxwell had a similar experience, a branch house succeeding the Longstreth Motor Car Co. in its representation here. The Speedwell has been transferred from the Standard Motor Car Co. to the Continental Motor Car Co., which has completed its line by taking on the Parry. The Tioga Automobile Co., losing the Rambler, which went to the Hooper Motor Co., has taken on the Hupmobile. Prescott Adamson, the Columbia agent, has taken the Reo from the Reo Motor Car Co. of Philadelphia. The Keystone Motor Car Co., agent for the Packard, has been succeeded by the Packard Motor Car Co. of Philadelphia, practically a branch of the factory. The Brazier Auto Works has gone out of existence, and the Marmon, which it represented here, is seeking a local representative. The Fiat, formerly represented here through the medium of a

PHILADELPHIA STATISTICS

Capital invested	\$7,500,000
Number of cars sold in 1909.....	3,100
Value cars sold in 1909.....	\$6,250,000
Number of makes represented.....	72
Number of branch houses.....	15
Number of agencies.....	42
Number of tire agencies branches..	11
Number of tire agencies.....	10
Number of supply houses.....	28
Number of garages.....	72

branch, has been taken over by the Bergdoll Motor Car Co., which is also exploiting the Bergdoll to fill out a line depleted by the dropping of the Thomas and Welch. The Stearns, for some time without an actual habitat here, having been represented by Wyckoff, Church & Partridge, of New York, has been secured by G. Hilton Gantert, the ex-Motor Shop man. The Crawford, formerly handled by T. M. Twining and later by the Crawford Auto Co. of Philadelphia, has recently been taken over by the Hoopes Motor Co., which also secured the local agency for the Rambler. The Stoyke-Vogel Co., which handles the American, has dropped the Grout, Herreshoff and Babcock electric.

Accessories Business Grows

Around five big local jobbers—the Gibney, Nock, Autolight and Motor Supply Co., Charles Smith and Manufacturers' Supply Co.'s concerns—the local accessories business is growing steadily. Last year's progress may be measured by about the same average percentage of increase as marked the trade proper. The number of establishments increased one-third, from twenty-one to twenty-eight. Besides, the custom of the larger garages carrying steadily growing stocks of accessories has extended until the total business bears a not inconsiderable ratio to the grand total of the year's business.

The past year has witnessed a tripling of the local taxicab business. The Bergdoll Motor Car Co. is deepest in that branch in Philadelphia, not only operating the taxis but building them—a new three-story factory building having been added to the rear of its North Broad street quarters with a capacity of from seventy-five to 100 cabs a year, and where all the repair work of the three-score or more of Bergdoll cabs now in constant use is done. Twenty-five new Bergdolls are now nearing completion. A dicker is now on with the Pennsylvania Railroad Co., which, if it goes through, will give the Bergdoll concern a practical monopoly of the taxicab work around that busy hive and call for from seventy-five to 100 additional cabs.

The Quaker City Cab Co., which last year was feeling its way along carefully in the taxicab game, became thoroughly converted during the year, and now has thirty-five Berliets constantly employed; extensions to the service will be made from time to time, to keep pace with the growth of business.

The Pennsylvania Taximeter Co., which does all the Bellevue-Stratford work, besides its regular service, has thirty-five

cabs employed, mostly Autocars. Orders have been given for eleven more vehicles from the Bryn Mawr concern.

The Maxwell branch is also operating a number of Maxwell taxicabs independently from its quarters at 207-209 North Broad street.

All told, there are now nearly 150 taxis in operation in Philadelphia, and present indications point to at least a 50 per cent increase over these figures in 1910.

Real Estate Changes

While the past year did not witness such a large acquisition to the list of specially adapted buildings as marked 1908, quite a number of costly operations have been completed or are in course of completion. The big Winton and Elmore building, on the west side of Broad street, between Race and Vine, represents upwards of \$250,000. The Stoddard-Dayton-Pullman building, across the street, will cost \$50,000 for the building alone, and in this connection it is proper to remark that land values along the row have so increased that there was a boost in the tax assessment, with resultant growls from owners on both sides of the street. The rear factory addition to the Bergdoll plant at Broad and Wood streets was completed early in the year at a cost of \$80,000. The Studebaker company spent \$50,000 on its new plant at Eighteenth and Hamilton streets. The Philadelphia Consistory, Thirty-third degree Masons, bought the Muhr building, southwest corner of Broad and Race streets, during the past year for \$300,000, and has converted it to the uses of the motor trade, the bulk of the big building being so occupied. Shortly after the first of the year the Automobile Sales Corporation—Peerless and Cadillac—will break ground for its new \$350,000 six-story building on the site of the old structure now occupied by it.

The Quaker City's trade is gregarious to a degree. Very few prominent concerns are to be found away from the row, and one of these, the Studebaker branch, was forced by the necessity for greatly increased space to accommodate its distribution business to seek quarters close to the Reading railway at Eighteenth and Hamilton. Even so, the Studebakerites are but four blocks distant from the glamour of the row. J. M. Quinby & Co., at Twelfth and Walnut, are doing a thriving business, and they seem to be one of the few exceptions that prove the rule. The Longstreth Motor Car Co. also has recently opened a branch on Chestnut street, opposite the postoffice, but this innovation is doubtless a makeshift to secure effective display room pending the finishing of its new row quarters, which are now rapidly nearing completion. The Brazier Auto Works, which was located across the river in West Philadelphia, could not make the Marmon a go so far away from the row; the Rambler was probably transferred from the Tioga Auto Co. to the Hoopes Motor Co. for the same reason, the former being 4 miles too far north on Broad street.

Proud of Being Slow Old Dutch Town



ST. LOUIS, Mo., Dec. 20—St. Louis often has been called a slow old Dutch town. This sobriquet has been repeated so many times that it has become a proverb. And, instead of resenting it, the business men of this city have grown to feel proud of it. This is especially true of those who have devoted and are still devoting their time to the motor industry, whether as salesmen or manufacturers of this marvelous time-eliminator which has been adopted by the American generation of the early part of the most thoroughly progressive century in the history of the nation.

St. Louis is slow in the sense that it is cautious. When the motor car appeared with the dawn of a new era St. Louis said "Wait." And every man who at that time had dared venture upon the new enterprise and who still is interested in the development and progress of the motor car will attest that the verdict appeared cruel. But, while St. Louis was slow, St. Louis is not beyond conversion; and when once convinced, like the proverbial polar bear, it claims the right of way in all directions.

Growth of Past Year

This, beyond doubt, has been the history of the motor car in St. Louis, although it must be confessed the awakening came comparatively late. In fact, St. Louis' stride in the motor business has just been reached. This fact is verified, substantially and beyond controversion, by the statistics officially on record in the office of the recorder of deeds. These statistics show not only that the number of cars owned and operated in the city is 50 per cent greater than the number in operation here a year ago, but that, probably a natural consequence, the gain in all other branches of the business has been, on an average, of an equal ratio.

With the close of the present year there have been 2,815 licenses issued for the operation of motor cars within the city of St. Louis. The total number issued in 1908 was 1,909. This is a fraction below a gain of 50 per cent; but it must be taken into consideration that, this year as never before, an owner is given the privilege of operating two or more cars under the protection of one license. By reason of this fact and owing to his general knowledge of conditions, City Recorder Joy authorizes the statement that the number of cars licensed within the last year to operate in the city exceeds 3,000. So this would place the increase beyond 50 per cent by a good margin.

As an example of how the motor car has gained in St. Louis since 1902, the first year of the strict license system, the city records show that licenses were issued as follows:

By **Caled Enix**

Year	No. licenses issued
1902.....	124
1903.....	285
1904.....	779
1905.....	1,124
1906.....	
1907.....	1,524
1908.....	1,909
1909.....	2,815

*Record confused

One Thousand Cars Sold

Then, according to the foregoing statement, which is vouched for by the city records, there were 906 cars sold within the year just ending, excluding the city recorder's estimate that the 906 licenses represent at least 1,000 new cars placed in operation on the streets of St. Louis within the last 12 months. But this by no means represents the number of motor cars sent out from the various factories, branch offices and agencies and now in use in contiguous territory. The actual number of motor cars sold in this city in 1909 was 2,461. These figures were obtained from three of the leading agencies. About 250 of those sold to persons living out of the city are in operation in East St. Louis, Ill. A good number went to Alton, Edwardsville, Belleville and other Illinois towns, while St. Charles, Clayton, other Missouri towns and wealthy residents of the rural districts of both Missouri and Illinois are represented among the buyers.

Naturally this rapid growth of the salesman's possibilities called for more agencies and salesrooms, an increased number of garages and better manufacturing facilities, in fact, more factories. At the beginning of the year 1909 there were in St. Louis exactly twenty-nine salesrooms. There are today forty-two. This is an increase of a small fraction under 45 per cent. But again the true gain is not shown in the figures, because of the fact that within the last few months ten of the largest agencies have extended their territory as well as improved their facilities.

Four New Factories

There have been four new factories where motor cars are built added to the ranks within the last 12 months. There were seven at the beginning of the year and there are now eleven. In addition to this six of these establishments have almost doubled their facilities within the last 6 months.

Remarkable to say, there are only a

ST. LOUIS STATISTICS	
Number of cars sold.....	2,461
Number of salesrooms.....	42
Number of factories.....	11
New factories.....	4
Number of garages.....	26

half dozen garages in St. Louis today that were not here a year ago. There are twenty-six of these establishments now. A year ago there were twenty-four. While six new ones have been built others have consolidated until the number has, in fact, been augmented by only two. This is explained by the statement that St. Louisans are, more than ever, building their own private garages, which of course are not included in this review.

Exclusive of the agencies and the manufacturing St. Louis has three factory branches whose main offices are in other cities. There are not as many salesrooms as there are branches, agencies and manufacturing combined for the reason that in several instances agencies are consolidated. On the other hand, some of the more prosperous agencies have more than one salesroom.

New Buildings Going Up

It has been only within the last few months that the question of new buildings has taken hold of St. Louis dealers. There are now under course of construction eight new buildings which will be occupied by one of the various departments of the trade. There are not more than a half dozen new buildings occupied by dealers. Within the next 12 months, however, it is predicted that many new buildings will be erected either for garage purposes, salesrooms, or for branch offices.

The increase in accessory establishments was slow the first three-quarters of the year, but within the last 3 months several new agencies have entered the city. Also there have been a few manufacturing of this class incorporated, and all who have cast their lot in this part of the business report a good trade.

St. Louis has no row, lest it be possible for a city to have two rows. The business, on the other hand, is not exactly scattered, but is located principally in two almost extreme parts of the city. The first salesrooms and accessory houses were opened in the extreme downtown section on Olive street. A few years ago, after this had been called the row, a number of salesrooms and garages sprang up as far west as the 3900 block on Olive street, and in a short time others were opened as far out as twenty blocks farther west. The result was there was a sort of rivalry between these two sections of the city, and this rivalry has maintained. At present there are any number of establishments from Second street to Twelfth street on Olive and neighboring streets, while the same may be said of Olive street from 3900 to 5000 west, and of Delmar avenue, which runs parallel to Olive, between the same numbers.

To forecast the outlook for the next year

would be little short of a repetition of the business in St. Louis within the last few months. There is one thing, however, which is significant, and that is St. Louisans have quit buying cheap cars. In fact, cheap cars never have been very popular here, but whatever desire there may have been for them seems to be on the wane.

Dealers of all classes are agreed that within the last 6 months more than 50 per cent of the cars purchased by St. Louisans, and even by those buying in the St. Louis territory, have been of the \$2,500 class and up. This, in the opinion of these men who are devoting their life to the business, presages not only an unparalleled year for 1910 but lends assur-

ance to the belief that the slow old Dutch town has awakened to the fact that the motor car has become indispensable.

Another instance of this fact is shown, too, by the city records as regards horse-drawn vehicles. In 1907 there were 26,327 horse-drawn vehicles licensed in St. Louis. In 1909 there have been only 24,970 such vehicles licensed. Every style horse-drawn vehicle has shown a decline except the huckster wagon and it only has held its own. Even delivery wagons are falling every day into the motor class. The one-horse cab and the hackney coach have almost disappeared, and that within the last 2 years, for both were once popular here. But the slow old Dutch town has waited and it has been convinced.

Milwaukee Shows Increase



MILWAUKEE, Wis., Dec. 20—It is safe to say that the growth of the motor industry in Milwaukee during the year 1909 averages 35 to 40 per cent—the most remarkable growth it ever has experienced during a like period, but not at all out of proportion with the growth of all other industries, trades, or business in the metropolis of Wisconsin, long recognized as one of the greatest trade centers in the world.

As to the future, it is safe to say that the growth of the motor industry during 1910 will not reach this high average. The reason is apparent. Not until the latter weeks of 1908 was there anything like a complete recovery from the panic, and the benefit was not gained until 1909. This made 1909 a remarkable year. Reasonable expectation, therefore, must be for a lower average of growth in a year following a high-record period, when that high-record period was induced by a restricted year previously.

Much credit for the increase in the sales must be given to the first annual show under the auspices of the Milwaukee Automobile Club, which was held in the Hippodrome, Milwaukee, early last March. The sales made during the show were in themselves of a remarkable number, for the sales resulting from the show were even more so.

Dealers Widely Scattered

An interesting feature of the selling end of the industry in Milwaukee is that the salesrooms are more widely distributed here than in almost any city of the United States. There has been practically no inclination toward centralization or localization. The district in the vicinity of Fourth, Prairie, Poplar and Cedar streets is called motor row by the dealers located there, but they form only a small percentage of the total number. It is a fact that one must go only one or two blocks in any direction from the center of the city to find an agency or a

By Leonard E. Meyer

garage, and, continuing, find one every two or three blocks beyond. It makes no difference, apparently, where a salesroom is situated; no one district has an advantage over the other.

The fact that many owners have built private garages during this year does not seem to have restricted the business of public garage keepers. There always is a new buyer to take the place of the owner who decides to keep his own car.

Fifty-nine gasoline cars are now represented in Milwaukee, besides seven electrics, one steam car, four trucks and three buggies. During the year such well known cars as the Lozier, Inter-State, Velie, Aperson, Knox, Stevens-Duryea, Hudson, Hupmobile, American, Moline, Glide, Auburn, Mora, Marmon, Marion, Falcarr, and others have gained representation.

As yet none of the foreign manufacturers has an agent here, and there are many other excellent makes that have gained no foothold, notably the Austin, Rainier, Chadwick, Corbin, Alco, Selden, Herreshoff, Lexington, Matheson, National, Rider-Lewis, Premier, etc.

The high-priced cars, however, have figured more largely in the year's sales than ever before. The many sales of the Pierce-Arrow are an example. In moderately priced cars the native Wisconsin

makes, like the Kissel, Rambler, Mitchell, Petrel and Johnson, enormous sales have been made. The Ford, Hupmobile, Brush, Hudson and other low-priced makes, naturally, are largely in evidence.

During the year the Mitchell, Kissel, Olds and others have opened branches in Milwaukee to replace the district agencies. Early in December the Studebaker Automobile Co., of South Bend, opened a branch in the Colby-Abbott building.

Pretentious garages and salesrooms were built by these: The W. L. Hibbard Motor Car Co., which dissolved in September, the building now being occupied by the Jonas Automobile Co. as the main agency for the Peerless and Cadillac; the Kopmeier Motor Car Co., American, Velie and Detroit electric; which is the largest garage in Milwaukee; the Auburn Motor Co.; Mitchell Motor Car Co. branch; while about ten concerns remodeled old buildings for their purposes.

The Petrel Motor Car Co. moved its factory from Kenosha to Milwaukee during the year. The A. O. Smith Co., manufacturing the Palmer & Singer for the New York company of that name, is completing a \$500,000 factory in Milwaukee. The bulk of its business is the production of pressed steel frames and parts. The Davis Mfg. Co., manufacturer of motors, has built a new factory and since then a large addition; the Sternberg Mfg. Co., truck builders, is erecting a new \$60,000 factory at West Allis, Milwaukee.

The Badger Motor Car Co. of Columbus, the Wisconsin Carriage Co. of Janesville, the Burdick Motor Car Co. of Eau Claire, and the Owen Thomas Motor Car Co. of Janesville are among the new manufacturers in Wisconsin this year.

Electrics Well Represented

With eight electrics on the market, and all represented in Milwaukee, this division of the motor car business has shown a wonderful advance. It has also created a wider demand for garage room, as few owners care to keep their own electrics. There are now several garages that care exclusively for electrics.

The prediction made in last year's review that "in 1 year from now there will be cars on the streets of Milwaukee bearing license numbers as high as 10,000," has come true. A year ago the highest number was 7,000.

Milwaukee is getting on the map with a vengeance. It has an energetic motor club, with the coöperation of the dealers. It has an annual motor show, which this year will be one of the largest in America, excepting New York and Chicago. It was a tank station for the Glidden tour of 1909, and it wants to be something better next time. With a population of 385,000, it is fast reaching the national average of cars in use. The anticipation of 1910 sales in the table is a very conservative estimate. The thing that makes for success, coöperation between cities and their industries, obtains in Milwaukee.

MILWAUKEE STATISTICS

	1908	1909
Branches	3	6
Motor car dealers.....	28	37
Makes represented	43	75
Tire agencies	9	12
Supply houses	12	22
Mfrs. in Milwaukee.....	2	6
Mfrs. in Wisconsin.....	5	16
Makers of motors, parts, etc., Wisconsin.....	10	21
Cars sold in Milwaukee, estimated	780	1,150
Sold in Wisconsin.....	1,250	3,000
Amt. of capital invested..	\$2,750,000	\$5,000,000

Hoosiers Show Factory Strength



INDIANAPOLIS, Ind., Dec. 20—Briefly summarizing the 1909 season and forecasting that of 1910, there have been approximately 3,300 cars sold by local dealers this year, while during the coming season Indianapolis manufacturers will have a minimum output of 20,100 machines. It is hardly necessary to say that about 50 per cent more cars were sold during 1909 than in 1908, and that for next year several manufacturers are doubling their output.

Manufacturers give the following figures as their minimum output for the 1910 season: American Motor Car Co., 300; Cole Motor Car Co., 1,000; Empire Motor Car Co., 1,000; Marion Motor Car Co., 1,000; National Motor Vehicle Co., 600; Nordyke & Marmon Co., 500; Overland Automobile Co., 8,000; Parry Automobile Co., 5,000; Premier Motor Mfg. Co., 800; Star Motor Car Co., 1,000 and Waverley Co., 900. The Howe Engine Co., manufacturer of motor fire apparatus, is unwilling to give an estimate, stating it will base its output according to the demand.

There will be thirty-one sales agencies during the 1910 season. In giving the lines these agencies will represent, figures supplied by the dealers are given as far as possible, showing their 1909 sales. The line up will be as follows:

Buick Motor Co.—Buick and Olds. Sales 1909, 600.
W. N. Benson—Elmore. Sales, about 40.
Conduitt Automobile Co.—Knox and Velie, new. Sales, 20.
Coppock Motor Car Co.—Coppock.
W. D. Cost—Frayer-Miller.
Finch & Freeman—Auburn, Richmond, De Tamble—new—and Rider-Lewis. Sales, 300. This company has contracted for 450 cars for 1910.
Fisher Automobile Co.—National, Marmon—new, Empire, Stoddard-Dayton, Overland and Baker. Sales, 450.
Gibson Automobile Co.—Premier, Ford and Reo. Sales, 752. Regal and Marmon agencies discontinued for 1910.
Gilde Automobile Co.—Gilde, new.
Hearsey-Willis Co.—White, Mitchell and Hupmobile. Sales, 77. Has contracted for 305 cars next season.
Indiana Automobile Co.—Thomas, Hudson and Chalmers-Detroit. Sales, 300. Has contracted for 450 cars next season.
Indianapolis Automobile Co.—Cartercar and Brush. Sales, 64. Has contracted for 400 Brush cars next season, of which 242 are sold and deposits made.
Indianapolis Motor Car Co.—Rapid. Sales, 75.
International Harvester Co. of America—International.
Knickerbocker Automobile Co.—Rebuilds cars and has sold about fifty this season.
Maxwell-Briscoe Indianapolis Co.—Maxwell, new.
Morton Place Garage—Moline. Sales, 51.
Motor Car Sales Co.—Peerless, Regal—new. Jackson—new. Sales, 100. Has 105 Regal cars for 1910 sold.
Nordyke & Marmon Co.—Sales branch Marmon. Sales, about 60.
Parson Band Cutter & Self Feeder Co.—Marson, new.
Reliable Automobile Exchange—Continental 35 and Atterbury. New company.
Rambler Automobile Co.—Rambler. New company.
Shoemaker-Smith Automobile Co.—Parry. New company.
State Automobile Co.—Oakland. Sales, 75. Has contracted for 425 cars in 1910.
Charles W. Sheetes & Son—Lambert. Sales, 13.

By C. L. Cummins

Sterling Motor Car Co.—Firestone and Petrel. Sales, 11.
Studebaker Brothers Indianapolis Co.—Studebaker E-M-F, Studebaker Garford and Studebaker Flanders. Sales, 187.
S. J. Summers—Holtsman. Sales, about 50.
Van Camp Hardware and Iron Co.—Randolph. New agency.
Henry Wilke—Winton. New agency.
Willis-Holcomb Co.—Packard and Apperson. Sales, 60. This company has sold its entire 1910 Packard allotment of thirty-six cars.

In addition to the figures presented approximately 500 second-hand cars have been sold. This large sale was due largely to the fact that many dealers disposed of their allotments early and also to the fact that deliveries of many new cars were slow.

City a Distributing Center

The apparently large number of sales is accounted for by the fact that this city is the distributing center for Indiana. Practically every agency is either for the entire state or for all of the counties in the vicinity of Indianapolis. In addition to the agencies named there are the following general distributing agencies: Meixell-Downing Co., Clark and Continental; Henderson Motor Sales Co., Cole and Ricketts, which has twenty-three states for the Ricketts.

During the last season the demand has been largely for cars selling at from \$1,000 to \$1,500, probably 65 per cent of the cars sold coming within this class. There has been no decrease in the sale of higher priced cars as compared with 1908, however. Practically all buyers had a tendency to purchase cars fully equipped.

The present year has seen the Empire Motor Car Co., the Parry Automobile Co. and the Star Motor Car Co. organized. The motor car business of the Cole Carriage Co. also was taken from the carriage plant and organized under the name of the Cole Motor Car Co.

Companies that have gone out of business during the year have been: Washington garage, conducting a garage and a transportation service between Indianapolis and Waverley; the Anderson Motor Car Co., maintaining a garage; the Chalmers-Detroit Automobile Co., representing the Chalmers-Detroit and Pierce-Arrow; the Indiana Carriage and Auto Co., which represented the Jackson and which went into the hands of a receiver, and the D. B. Sullivan Auto Co., which had the Lambert agency.

A number of new buildings have been

erected, or are just being completed. The Overland Automobile Co. has spent \$70,000 in new buildings and \$50,000 in equipping their factories with power plants. The Studebaker Brothers Indianapolis Co. is just moving into a four-story building built at a cost of \$124,500. Contracts will be let this month for a three-story building for the Maxwell-Briscoe Indianapolis Co. at Illinois and Vermont streets, to cost \$60,000, and the Indianapolis Motor Car Co. has plans for a \$30,000 addition.

The G & J Tire Co. has erected several new buildings, spending approximately \$125,000, while the Premier Motor Car Co. has built a \$15,000 addition. The National Motor Vehicle Co. has built an addition to its factory costing \$25,000 and an office building costing \$10,000. The Nordyke & Marmon Co. has made extensive improvements and a building is being completed for the Irvin Mfg. Co., top maker, which has cost \$15,000.

Few Changes in Agencies

Few changes in agencies are noted for the coming season. These may be noted as follows: Buick Motor Co., adds Olds; Conduitt Automobile Co., adds Velie; Finch & Freeman, add De Tamble and discontinues Haynes; Fisher Automobile Co., will add Marion; Gibson Automobile Co., discontinues Regal and Marion; Hearsey-Willis Co., discontinues Waverley and Rambler and will add Hupmobile; Motor Car Sales Co., will add Regal and Jackson; Sterling Motor Car Co., discontinues Cole.

A conservative estimate places the capital invested in the motor car and accessory business in Indianapolis at \$5,000,000. There are eighty-eight concerns identified with the industry, as follows: Motor car factories, 12; exclusive repair shops, 13; exclusive garages, 5; liveries, 4; sight-seeing company, 1; battery manufacturer, 1; tire manufacturers, 2; motor car agencies, 31; wind-shield manufacturers, 2; carbureter manufacturers, 2; motor college, 1; engine manufacturer, 1; body manufacturers, 2; magneto manufacturer, 1; exclusive accessories dealers, 2; chain manufacturers, 2; miscellaneous parts manufacturers, 2; general distributing agencies, 3; speedometer distributing agency, 1.

One of the notable features of the present year was the building of the Indianapolis motor speedway at a cost of about \$700,000. This big oval, which is 2 miles in circumference was built during the year, but it was not completed in time for a meet in June as expected. Instead it was August before the track was used for racing purposes. The first meet developed that the surface could not stand such high speeds, so brick was substituted.

INDIANAPOLIS STATISTICS

Capital invested	\$5,000,000
Concerns identified with industry..	88
Factories	12
Estimated output for 1910.....	20,100
Makes of cars represented.....	31

Portland-Tacoma-Seattle-South Bend



PORTLAND, Ore., Dec. 18—During the past year greater activity has been manifested in the motor field in this city than at any time previously. In fact, ever since the Portland show, held early in the year, all makes of cars have sold readily, the only thing which has limited the sales being the inability of dealers to secure additional cars from the factories. The dealers anticipate having their wants taken care of in 1910, and in most cases already have their 1910 demonstrators on the ground, to be followed shortly by numerous carloads of the new models.

Five new concerns have entered the Portland field this year, building new salesrooms and garages of improved architecture, and three new supply houses have taken their stand on the row, located on Alder street between Fifteenth and Seventeenth street. There is both a tendency to centralize the selling places and in some few instances to scatter. The downtown row located at Seventh and Couch streets consists of the Keats Automobile Co., the pioneer in the field, the Covey Motor Car Co. and the Northwest Buick Co. The up-town row, located in the apartment house district, consists of fifteen concerns, with prospect of several additional.

Considerably over 500 cars have been disposed of by the various dealers in Portland of the standard makes, and over 200 additional have been distributed to the various sub-agencies scattered throughout the state. Provided the dealers secure their allotments as promised the number of cars sold during 1910 should double the number disposed of during the past year.

The Portland Automobile Club now has a membership of 500, and during the past year has done its share in making the motor car popular, having urged all owners to observe the speed regulations, contributed money for improving the city's streets and surrounding roadways, besides carrying out the show plans in an acceptable manner. The Portland Automobile Dealers' Association is doing good work and during the past year has increased its membership to include all the dealers and tire and supply houses.

Tacoma's Report

Tacoma, Wash., Dec. 18—During 1909 considerable progress has been made in the motor car business in Tacoma, three new concerns having entered the field—the Northwestern Automobile Co., which recently completed its new garage at North Fife and Twenty-first streets, distributors for the Rambler cars; the Tacoma Motor Co., South Eighth and C streets, carrying the Oldsmobile and Oakland cars, and the Winton agency, recently established at Seventh and Pacific avenue. Two taxicab

By F. K. Haskell

COAST STATISTICS

Cars sold in Portland.....	500
New concerns in Portland.....	5
Cars sold in Tacoma.....	300
New concerns in Tacoma.....	3
Cars sold in Seattle.....	600

companies have been established during the past year, the Pacific Car Co., which has installed six taxicabs, and the Tacoma Taxicab Co., which runs three cars. The Edwin Chambers Co., located at 714 Pacific avenue, and the Auto Supply Co., recently incorporated at South Eighth and C streets, comprise the supply and tire houses of the city. The dealers show a tendency to locate in different parts of the city, principally on account of the high rents charged on the two principal streets, but it is hoped in time that a row will be established between Seventh and Ninth streets on South C.

Approximately 300 cars of the standard

South Bend Prospers



By C. N. Pollock

SOUTH BEND, Ind., Dec. 7—With a visit to the garages, salesrooms and factories that in any way are interested in the motor car business in this city, one comes away from each and every one of them with very optimistic views for the coming year in the motor trade.

Business has increased over the year 1908 to a very marked degree, and the outlook for the 1910 trade is expected to eclipse the past year to a very great extent. Some of the dealers report that their allotment for the year is nearly sold out at this time. One salesman reports that it is not necessary for him to get out and work, as his allotment up to March 4 is now sold, and it is impossible for him to get from the factory enough machines to supply his territory. All garages are full to overflowing, one garage and salesroom will in the next year be doubled in its capacity in order to properly take care of its increasing business and have sufficient room to display its line of new cars. The Studebaker Automobile Co. will manufacture during the next year 42,600 gasoline cars, which in round numbers will amount to about \$40,000,000, which it claims is the largest output of any concern in the world. All in all the year 1909 has been a very profitable one and 1910 is expected to be far in excess of the present year in all lines of the business.

makes have been sold in Tacoma during 1909, and the dealers have considerable more than this amount ordered for 1910. Considerable interest is being taken in improving the roads about Tacoma, especially the one to Mount Tacoma, and this will undoubtedly help the sale of cars during next season. At the present time the Tacoma Automobile Club has no definite plans, but expects to outline an energetic campaign early next spring.

Exposition Helps Seattle

Seattle, Wash., Dec. 18—The Alaska-Yukon-Pacific exposition held in Seattle the past year unquestionably helped all kinds of business and especially the motor car trade. For a number of years past the row, located between Madison and Pike streets on Broadway, has housed a dozen motor concerns, each carrying several standard makes of cars, but commencing early in 1909 the Olympic Motor Car Co. started the row on Fifth avenue in the downtown district, being shortly followed by the Metropolitan Motor Car Co. and other concerns, thus making two rows for this busy city. The taxicab business has been especially good on account of the heavy tourist travel to the fair and taking parties to the surrounding points near by. The Seattle Taxicab Co. had in operation all the year twenty-five taxicabs, which rendered efficient service both in negotiating Seattle's steep hills and making the long distance trips. Between 500 and 600 cars have been disposed of in Seattle during 1909 and the 1910 season it is believed will equal if not exceed this year's business. The Fisk Rubber Co., the Firestone, the Chanslor & Lyon Motor Supply Co. and the Michelin tire agency have all been established during 1909 in new quarters and are located adjacent to one another, forming tire row. There promises to be enough business to keep them all busy during the next year.

The Winton people are about ready to take possession of their new six-story building at Pike street and Terry avenue, which has 54,000 square feet of space. An original and unique feature will be the large roof of 8,800 square feet, which will be used for testing and trying out cars, where the noise and gases will annoy no one. The two basements will be used for the storage of cars. There is a spacious court in the center, set off from the stalls. Large lockers will be supplied for the storage of loose equipment. A club room with all trade magazines, billiard and pool tables, will be maintained for the chauffeurs.

The Seattle Automobile Club has worked hard during the past season and has been instrumental in improving the boulevard system in Seattle.

By W. H. B. Fowler

SAN FRANCISCO, Cal., Dec. 17—California never has had a more prosperous year from a motoring point of view than the 12 months just closing. Not even in the boom times that followed the distribution of hundreds of millions of dollars of insurance money after the great disaster of 1906 was there such a heavy and consistent demand for the motor car as there has been during the past season. The situation is very aptly described by the head of a local firm which handles two popular cars. Speaking of the situation, he said:

"I think the buying public is beginning to realize the importance of purchasing their motor cars when able to get delivery. This is the reason that we are doing 100 per cent more business than we ever did before at this season of the year. Then, too, we are getting new models in much larger quantities than we ever did before at this time of the year. The factory realizes that a big winter business can be secured on the coast if they get the cars out here early. We are receiving our machines at the rate of three or four carloads a week right along, but so far we have been unable to get a stock ahead, as the cars are sold and delivered just about as fast as they arrive."

The register kept in the office of the secretary of state records the sale of 8,767 motor cars in the state of California during the 12 months from December 1, 1908, to November 30, 1909, as compared with a total of 5,361 for the previous 12 months. This indicates an increase of about 65 per cent, but these figures do not show the real extent of the sale of cars during the season. A very large number of cars have been sold which have not yet been delivered, and consequently do not figure in the statistics given out by the secretary of state. There is hardly an agency in the city of San Francisco that has not a long list of purchasers yet waiting for their cars. Some of them have been waiting for months, and the indications are that many of them still are a long way from the actual possession of their cars. One local house has on its wall a tabulation of the names of those who have purchased the three different makes of cars which it carries. As deliveries are made the fortunate ones are checked off, but until the last month more new names were added at the bottom than were cut off at the top.

The same situation is true at Los Angeles, which is the other big distributing center of the state. While perhaps it is not legitimate to count these sales in a compilation of this season's business, yet they should not be lost sight of when one seeks to get a clear idea of what has been done in California during the past year.

Buy All Types of Cars

It has been a prosperous year for mostly everybody. The agent of the big car and the representative of the little one have done equally well. The advent of the small and low-priced car has had no appreciable

Prosperous Year On Coast



STATISTICS OF CALIFORNIA TRADE

Value of cars in San Francisco.....	\$ 2,000,000
Value of cars in northern California.....	\$ 7,000,000
Value of cars in all California.....	\$17,534,000
Cars sold in 1909 in San Francisco.....	1,000
Cars sold in 1909 in northern California.....	3,500
Number of branches in San Francisco.....	10

effect upon the market for the big one. There are plenty of wealthy men throughout the state who maintain a stable of three or four or half a dozen of the finest American cars, sometimes with two or three foreign machines besides. The small car has found an ample market both in city and country. Business men have found it essential for the prompt and convenient transaction of their business; it has come to be regarded as a strict business necessity. The man of the country has come in with a strong demand. It has been a bountiful year for the farmer and the fruitman and the merchant, and they have not been behind their brothers of the city in their appreciation of their value of the motor car.

Orders from the Country

These orders from the country have banked in upon the main distributors in San Francisco and Los Angeles until the latter, already in despair over their inability to meet even their city demand, have in many instances packed up their grips and gone back to the factories in the middle western and eastern states to make a personal plea for cars. Some of the agents have made as many as three and four trips during the last few months and have finally stayed there until they saw at least a demonstrator for 1910 shipped out, and have secured pledges that cars for delivery would follow within a reasonable time.

At the present time things look exceedingly bright for an almost unbroken business right through the winter. The weather has been remarkably fine. What rain there has been has come at intervals and has not been of long duration. There has been practically no interference with the selling of cars or the use of them. The farmer is jubilant over the situation, and in the belief that his crops next year will be better even than they were this, he is already turning over in his mind just which make of car he will buy for himself. The factories in the east, apparently are getting into better shape than they have been and they are sending out shipments to the coast more freely. The stacked-up orders are being filled and the agents are turning over their capital and getting into better shape for the season just opening.

It is not at all improbable that the next 12 months may see the sale of 20,000 motor cars in California. It is difficult to get exact figures from the agents of what they

expect to do, for after their experience during the financial pinch of 1907 they are moving along on the most conservative lines. All of them, however, are preparing to handle a much bigger volume of business. The growing popularity of the low-priced car will be one of the big factors, opening up a market that heretofore has hardly existed at all. The remarkable demonstrations of endurance that have been given during the past year or so by cars of this type have not been without their effect upon the prospective buyers of motor cars—and that term may be applied to tens of thousands of persons who, sooner or later, will realize their ambitions to own the modern vehicle.

Practically every general agent in San Francisco and Los Angeles has his sub-agents in every county of the state, and the field will be finely combed. Conservatively, it may be predicted that the past year's record of 8,767 cars will be doubled, and there will be no surprise if 20,000 should be reached or even surpassed. All, of course, depending upon the uncertainty of the factories in the east to make deliveries. These cars will be about evenly distributed between northern and southern California, with the south, perhaps, taking a few more cars than the north, although the sales in the latter district will incline more towards the higher priced cars, and consequently represent a greater investment.

Big Increase in Agencies

The number of cars represented in San Francisco, which may be taken as a fair index for the state, has just about doubled during the past 12 months. A year ago in the neighborhood of forty different makes of cars were represented in San Francisco, while at the present time there are close to seventy-five. The newcomers represent every type. Some of them are cars that have been represented here before, and, for one reason or another, have dropped out. Then there are high-class cars like the Lozier, Apperson and the American Locomotive that have come in; medium priced cars like the Knox and Corbin; little fellows like the Hupp, Hudson, Empire and De Tangle; and finally the newest products on the market, like the Selden, Everitt, Flanders, Kline-Kar, Black Crow and half a dozen others.

The electric field has been liberally added to, although this type of car has not yet succeeded in winning a real place

Los Angeles Motoring Hot-bed



STATISTICS OF CALIFORNIA TRADE

Number of agencies in San Francisco.....	40
Cars contracted for in 1910.....	5,000
Cars sold out of Los Angeles in 1909.....	4,800
Volume of Los Angeles business.....	\$10,432,000
Number of firms in Los Angeles.....	60



for itself in this part of the state. One or two of the agents have worked assiduously to persuade buyers of the utility of this type of car for shopping purposes or for country house use, but not with great success. The buyer always has come back with the reply that San Francisco is too hilly and the streets are too rough for the electric and that the limitations of its operating radius are too narrow. It will require some striking demonstrations to get these fixed ideas out of the heads of Californians.

Commercial Car Progress

Nor has the motor truck made a great deal of progress here, although it may be said that there are very hopeful signs. Not a few of the agents are carrying trucks of one kind or another, and most of them have put out a few among the merchants of the city. Some of these trucks have been in use for a year or more, and the fact that the same firms are buying additional machines would indicate that they are receiving satisfactory service, which is also an economy over the horse-drawn vehicle.

An indication of the importance attached to the California market is given by the establishment of branch houses by many of the big eastern factories and even one foreign house. Thomas B. Jeffery & Co. and the White Co. long have maintained factory branches in San Francisco, while almost 2 years ago Renault established a selling branch here which has done remarkably well. For 2 years, also, the Winton Motor Carriage Co. has had its branch here, which has done so well that the end of the season will probably see it very close to the top of the Winton's list of selling agencies, a distinction which was held last season by the Seattle agent, who sold more than 100 Wintons in his territory alone. During the past year half a dozen or more new branches have been established here. Most important is that of the Locomobile Co. of America. This firm is just moving into the most elaborate building on this coast devoted solely to the sale of motor cars. It has erected on Van Ness avenue a three-story reinforced concrete building, every part of which will be devoted to its wholesale and retail business, which covers all of the Pacific coast and in addition the territory of Hawaii and the Philippines. The investment represents approximately \$150,000. The H. H. Franklin Mfg. Co. of

Syracuse is now represented by a subordinate company which is, in fact, a branch. The Maxwell-Briscoe Motor Co. has followed the same plan, as also has the York Motor Car Co., manufacturer of the Pullman. The F. B. Stearns Co., of Cleveland, has established what it terms a wholesale department, carrying a stock of cars and parts.

Another interesting phase of the branch house plan is the arrival of the Bosch Magneto Co., the Remy Electric Co. and the Stromberg Motor Devices Co. All these firms have found their interests upon the coast growing to such an extent that it served their best interests to send out their own representatives to take care of their customers.

Among the tire houses there has been little change during the past year. Factory branches are now maintained here by the Diamond Rubber Co., the Fisk Rubber Co., the Continental Caoutchouc Co., the G & J Co. and the Michelin Tire Co. These branches have been in existence for some time and there have been no additions during the last 12 months. Most every other make of tire that is on the market is represented here through some accessory house.

In the matter of new buildings, the situation in San Francisco is peculiar. The fire of 1906 swept out of existence the entire motor section, and until a year ago everything was in temporary shacks. Gradually these wooden structures have given place to permanent buildings, which have been designed to meet the special needs of the motor car business. They are mostly all grouped along Van Ness avenue, a great, wide, asphalted boulevard which is the city's parade ground on state occasions, while others branch off to the right and left on Golden Gate avenue, another well-paved boulevard. Within the space of a few blocks along these two streets is practically every motor concern in the city, the most notable exceptions being the Studebakers and the Diamond Rubber Co., which are occupying large buildings far away in the downtown wholesale district.

An interesting departure from this grouping around Van Ness and Golden Gate avenues will be that of Cuyler Lee, the local representative of the Packard and Cadillac cars, who is erecting a costly building far over on Van Ness avenue and close upon the boundary of the aristocratic residence section.

By Frederick Pabst

LOS ANGELES, Cal., Dec. 18—There is one motor car to every ten families in southern California. A somewhat surprising statement but the truth of which is proven by figures. There are 350,000 people in Los Angeles and the same number in the southern end of the state outside of this city. The state records show 28,000 licenses, and of these there are over half in this section of California. Figuring five people to a family, there are 140,000 families and 14,000 motor cars. We are natural boosters in Los Angeles, and cannot pass this opportunity to claim the credit of being the motor center of the world.

There are 10,000 motor cars in the city of Los Angeles, and the streets show it. Go in any direction out of Los Angeles at any time and a procession of machines will be met. There are more cars in general use than any other kind of vehicles. At the same time there are more dealers in Los Angeles than can be found in most cities of twice its size. Unknown indeed in the car which has no representation in this end of the world. Some of the agencies have done a big business for 1909, and naturally a number have done little.

Changes of the Year

In a city with over sixty motor firms there have naturally been considerable changes in agencies during the year, and recently the local dealers' association split, and there is now a strong division of licensed and unlicensed dealers in Los Angeles.

Forty-eight hundred cars were disposed of in 1909 and orders have been placed for 5,240 1910 models. Considering that the population increases 50,000 and all these cars are sold, there will be one machine to every seven families. Taking \$1,800 as the average cost, and this is a very low figure, there will be just \$10,432,000 invested in motor cars in southern California alone. These are not rough estimates; the figures at the end of the year will be found to be within a few hundred of being absolutely correct.

Then, in addition to the agencies considered, there are the usual number of tire and accessory houses, several top and glass front factories and two motor car factories.

The past year has seen the opening of many new garages in Los Angeles and a shifting of the row. In the past Main street south of Ninth has been the row, but with the increase in the number of garages Olive street between Seventh and Thirteenth has come in for a share of the honors. Not that Main street has become a back number, but Olive street has become fully as prominent.

The largest and most complete of the new places is the garage and salesrooms of the Stoddard-Dayton Motor Co. at Tenth and Olive streets. This is a beautiful structure built along mission lines. The salesroom has a frontage of 140 feet on Tenth street and 100 feet on Olive. The garage in the rear is 100 by 100, and

there is a second floor over both salesroom and garage. This is used as a repair shop, stock room, and an additional space of 50 by 200 is utilized as a charging plant for Baker electricies.

The home of the Franklin, controlled here by Ralph C. Hamlin, is another attractive place near Twelfth and Olive. It was the first of the local salesrooms to be finished with tile floors. The garage has two entrances, and the salesroom is large and attractively finished.

The Western Motor Car Co. has had another big year with the Packard and Chalmers-Detroit and has given the Hudson a good introduction. This company was able to make early deliveries of the Packards and Chalmers-Detroits.

The Lee Motor Car Co., agent for the Cadillac, was another national leader in 1909. Three hundred Cadillacs came into this territory, and Lee increased his allotment almost double for this season. Lee has established branches in Pasadena, Riverside, San Diego and Bakersfield, and is making a hot campaign for the country trade.

Shettler Does Well

Leon Shettler had no trouble placing several hundred two-cylinder Reos and all the one-cylinder cars he could secure. He also had a good year with Kissels and placed a fair number of Appersons. Shettler has one of the best sub-agency organizations in the country. He is also making a campaign this season with the Woods electric.

The Lord Motor Car Co. has had a really tremendous year with the E.-M.-F. This car had a slow start, but during the last 5 months made a whirlwind finish, and the total sales topped the 300-mark. This company also placed its share of Studebakers.

The Howard Automobile Co. made a move from South Main street to South Olive and has disposed of all the Buicks which the factory would send out here. This agency was taken from the Western Motor Car Co. and placed in the hands of Charles Howard, who represented the Buick company in San Francisco. The Mitchell was one of the popular medium-priced cars in southern California. The Greer-Robbins Co. had a 300-year and, despite late deliveries, has the brightest of prospects for 1910. This company found it necessary to build an additional garage to supply its trade.

Among the new cars to come into the field is the Selden, represented by H. O. Harrison. Harrison has the Peerless, and last May took the entire state of California for this car. Headquarters were established in San Francisco and Tom Williams was made Los Angeles manager. Ninety Peerless cars have been ordered for the two cities. W. E. Bush reports the sale of thirty Pierce-Arrow cars before the first of the year.

The Ruess Automobile Co. took the Pope-Hartford for 1909 and placed sixty cars.

Nineteen-ten is proving an even better year, and the racing successes of this speedy car is adding to its popularity. Nash & Fennimore showed the Lozier for the first time at the 1909 show, and it proved a good introduction. Many were sold and twenty-one orders already have been taken for 1910.

Other Concerns Prosperous

The Locomobile, which was handled a year ago by R. J. Leavitt, is in new hands. The company is known as the Los Angeles Motor Car Co. The Oldsmobile went into new hands and also a handsome new home built for the Woolwine Motor Car Co. on Olive street. This company also handles the Cartecar. Bireley & Young is a new firm handling the Columbia. This company entered the field in April and, with a very late start, placed twenty-three cars. One hundred is the allotment for 1910. The Motor Car Import Co. is a new concern made up of the people who were formerly the White Garage Co. This company gave up the White and took the Isotta and Halladay. Last year this firm sold forty-eight cars. This year the company has Auto Co. with the Mercer agency. Other

new lines which have just come into this field are the Lane steamer, Sterling, Cole and Marmon. Glen Edmonds has taken the Kline and placed an order for forty.

The White steamer and gasoline line changed hands, going to a new company, with G. Cummings at the head. This firm is building a large new garage and salesroom on Flower street. The Welch agency also is building a new place. Twenty-five Welch cars have been ordered for the season. The Woodill Auto Co., one of the oldest local firms, placed 100 Oaklands last year. The Stearns changed agencies, C. C. Slaughter taking the agency and moving into a large new place on Olive street. The Thomas agency also changed hands but not location. Wilson & Buffington took it. There was also a change in the Winton representative, the W. D. Howard Motor Car Co. taking the Winton in conjunction with the Chadwick. The Big Four Auto Co. moved to Main street with the Regal line. The Pico Carriage and Auto Co. took the Paterson and ordered fifty cars. There was also a change in the Auto Vehicle Co., maker of the Tourist. This company went out of existence and

DENVER STATISTICS

Total sales in 1909.....	\$5,000,000
Cars sold	4,000
Makes represented	75
Salesrooms	43
Garages	45

Factories	2
Branches	2
Agencies	41
Supply houses	3
Tire branches	5
Tire agencies	7

contracted for 150 Halladays and ten Isottas.

In 1909 the Standard Motor Car Co., agents for the Ford and Velie, placed 278 Fords and thirty-two Velies. For 1910 this firm expects to place 500 Fords and 100 Velies. Roger Stearns, formerly of New York, took the management several months ago. Last season was the first for the Schwaabe-Atkinson Co. Twenty Premier cars were placed and fifteen Auburns. This company has given up the Auburn and added the Randolph trucks. It has also contracted for a new garage, 60 by 155, at 1127 South Olive street.

In the two-cycle field there have been the long-established Elmore and a new company, Bekins-Corey, which handles the American Simplex and the Atlas. H. T. Brown, another newcomer, handles the Haynes, Knox and Parry. Charles H. Thompson, the Jackson agent, found it necessary to move into new quarters during the year. Late deliveries have handicapped him. The P. A. Renton Co. went into a large new two-story place at Pico and Main and added the Matheson to the Great Smith and Overland line. The Maxwell branch was placed under the management of J. S. Conwell during the year. This company sold out early last summer and has been handicapped since by late arrivals.

Among the new concerns is the Mercer

in its place the California Motor Co. was organized. The Durocar Co., another local factory, had a good year with its two-cylinder car.

H. D. Ryus had the Corbin, but after a few months the agency went to C. Ryse, who now has it. He is to move into a new garage which is being built. Mountain & Carrigan have the Royal and Midland and the Eastern Motor Car Co. built a new place to house the Stevens-Duryea. The Renault also was a newcomer, brought out by R. J. Leavitt. Walter Vail took the Pennsylvania agency and opened in a new place on Hope street, next to the Rambler, which is still handled by that veteran, W. K. Cowan.

In New Quarters

Smith Brothers went into new quarters with the Mora. The Brassey Co. has disposed of over fifty Hupmobiles, and a Petrel agency has just been established. Burkhardt & Crippen report a good year with the Inter-State and Lexington. The Pullman is among the newcomers. The Bosbyshell-Carpenter Co. and William Book with the Dorris and Aleo cars have taken a new place jointly. The Stanley steamer, Moline, National, Empire, Great Western, Sunset and Herrshoff also are well represented.

There are numerous top and glass front factories here. All the tire concerns have had a good year.

Leon Shettler bought the interest of Joseph Ollier in the Ollier & Worthington supply house, and Seeley, Van Zandt & Cracker was a new company with old men at the business in it. John T. Bill continued to hold his big following.

The commercial vehicle end of the industry has made great strides in Los Angeles during the past year. Of course there always has been more or less interest in trucks and delivery wagons propelled by motor power, but there has been no popular movement toward the adoption of these for general use. A local company had been operating a dozen large electric trucks for a number of years, and there were possibly fifty smaller cars being used by laundries, grocers and dye works. For the small delivery wagons a single-cylinder Cadillac has had the call, one company having eight of these in use.

But suddenly, like the coming of a thunder storm, large retail and wholesale houses began buying trucks. First a brewery had a line of trucks, then there appeared on the street a number of delivery wagons with the name of the leading grocery firm. Piano houses began using the motor truck, and now they bid fair to re-

place the horse-drawn truck within another year.

The Woolwine Motor Car Co. with the Rapid line got the call of the truck business, but other agencies have come into the field and all are doing well. There is the Grabowsky, the Randolph, the Reliance, Frayer-Miller, Buffalo and numerous delivery wagons made by the Brush, Cadillac, Kline, Tourist, Reo, Mitchell and numerous others sold here. During the last 2 months the first of the Packard trucks appeared. It is understood that one company has placed an order for ten of these.

Los Angeles has always been a good electric town, but during the past year a greater effort than ever has been made to get this business. The Stoddard Motor Car Co. secured the Baker line and is making an active campaign with it. Leon Shettler has the Woods, the Lord Motor Car Co. is pushing the Studebaker, the Rauch & Lang has secured a good start, and the Columbia and Detroit have a good representation. This latter car has had a wonderfully good year in southern California. The Stoddard company is finding a ready market for the Baker coupe. William Evans is placing many Waverleys.

The tire companies have also found Denver a fruitful field. Six of them maintain branches, while seven other makes are represented by agents. Three supply houses offer ample facilities for obtaining everything needed by the motorist in the accessories line. The largest of these, Fry & McGill, is a recent consolidation of the Consolidated Supply Co. and the Auto General Supply Co. The new organization is capitalized at \$100,000, and will do an extensive jobbing business throughout the adjoining states. The Brown-Bailey Auto Goods Co. is a newcomer, having been established only about 2 months, while the Denver Auto Goods Co. is one of the pioneer organizations along the row.

The commercial car did not come into use much in Denver until the past summer, but now the motor vehicle is being adopted for business purposes. At least a dozen manufacturers of commercial cars are now pushing their wares here, and a number of the dealers who have heretofore confined their attention to pleasure cars have decided to invade the commercial field. Taxicabs also have multiplied rapidly since the introduction of the first one last March, and now the six firms engaged in that branch of motoring find they have all the business they can handle.

The row, which a year ago was confined, with a few exceptions, within two blocks along Broadway from Fifteenth to Seventeenth, now has burst its bounds, the row proper at present extending from Twelfth to Nineteenth. An extensive offshoot branches into Cleveland place, nearly a dozen dealers finding locations there. A second colony is collecting on Capitol Hill, near the Fritchle factory.

The public garages now number about forty, all of which are filled to capacity.

Motor Club Prominent

The predominating influence in the motor world during the past year has been the Denver Motor Club. The club was organized only a little over a year ago and it has been an active factor ever since. On November 1, 1908, it had a membership of 187, and now there are over 500 of the prominent business and professional men of Denver on its rolls. The show given last March under the auspices of the Denver Motor Club was greatly superior to any previous show held, and at its close the club and the exhibitors divided \$3,000 profits equally. The show for the coming season has been abandoned, as the club could not secure a lease on the Auditorium until too late in the spring. A motor week in January is contemplated.

The Denver Motor Club held two contests during the year. The first was a 3-day reliability run from Denver to Pueblo and return, a distance of 230 miles. The winner of this received the Allen trophy, a cup presented by Charles P. Allen, the treasurer of the club. The second contest was a 290-mile road race over the Brighton course, a triangular stretch 14½ miles long, which was won by the Colburn.

Prosperity Denver's Key Note



By Robert W. Spangler

DENVER, Colo., Dec. 18—Approximately \$5,000,000 has been deposited in the banks during the past year by the motor car dealers of Denver as a result of their labors in the vineyard consisting of Denver and the adjacent territory for which it is the distributing point. Of this amount the people of Denver alone furnished nearly \$3,000,000, the remainder coming from the states of Colorado, Wyoming, Arizona and New Mexico.

Denver ranks as one of the first cities of the land in the number of motor cars owned by its citizens. This fact is easily accounted for, as it has all the necessary adjuncts to make motoring delightful. Good roads are plentiful, the scenery is the finest in America, the climate is unsurpassed, and the natural resources are such that the residents can get together the wherewithal which the manufacturer requires in exchange for his product. Gold and silver in the original packages abound, the United States mint two blocks away from the row stands obligingly ready to stamp it into the coin of the realm, and all the dealers have to do is to stretch forth their hands and receive the money in exchange for their cars. Coloradans who are not miners or motor car dealers find equally good rewards in raising spuds, sugar beets, Rocky Ford cantaloupes, peaches, apples and other high priced market commodities, so they, too, may indulge in the luxury of motor cars.

At the close of the year 1908 there were 1,550 motor cars registered at the city hall

in Denver. On December 1 of this year, 11 months later, the registration had passed the 4,100 mark. As many Denver owners have two or more cars and only one number the additional cars after the first having the number with a letter of the alphabet attached, this means that over 2,500 cars have been sold in Denver alone during 1909. As the cars sold easily averaged \$1,200 each, the total figures for Denver amount to \$3,000,000. The surrounding territory took an additional \$2,000,000 worth during the same period, bringing the total up to \$5,000,000. To supply this demand there are now more than forty dealers, representing seventy-five different manufacturers. Two factories, one making the Colburn gasoline car and the other the Fritchle electric, have both been established several years, and these share in the general prosperity. The Fritchle Automobile and Battery Co. has planned to double its output during the coming year, and the Colburn company also will increase its output during 1910. The Studebaker and the Ford companies both maintain branches. All the remaining cars represented are of American manufacture, with the single exception of the Renault, which is sold by the Colburn company. There are many points of similarity between the Colburn and the Renault, and as the Colburn company could not manufacture enough cars to supply the demand the Renault was taken on.

New England Makes Money



By James T. Sullivan

BOSTON, Mass., Dec. 20—When one considers that the motor industry has increased about 33 per cent in 1 year in Boston alone some idea of its wonderful growth in New England may be imagined. Yet that is what the figures show, and they are a good criterion. When a person delves into the question thoroughly, and seeks to reason out why there should be such a great increase he finds two reasons presented. The first is based upon the hereditary tendencies that taught New Englanders the art of accumulating money and being ready to place it out at interest where it brings the most, something that westerners know very well; and the other is the wonderful recuperative powers here after the financial troubles of 1907, the Bostonians having been well covered so that when the chances were offered to go into business along new lines the money was forthcoming.

So with this as a basis the figures may be taken as telling the story, and even then they are placed at a conservative figure. Take a year ago, when the writer presented a review for 1908, there were just sixty-five makes of motor cars represented. Today there are eighty-two scattered about Boston, without including the commercial cars, there being seven of the latter. There were only thirty-one agencies a year ago, and they represented fifty-one different cars, while today there are forty-seven agencies selling sixty-one makes. The increase in branches, too, is noticeable, being along the same percentage from fourteen in 1908 to twenty-one this year. An evidence of business being good is shown in the matter of discontinuances, there being thirteen agencies dropped during 1908, while but 8 went out in 1909. With more than 6,000 cars additional registered during the year, that meant an increase in sales by Boston dealers from approximately 3,500 a year ago to about 5,000 during the past year. This means increasing the estimated value of sales from about \$7,000,000 to \$10,000,000, and on the same basis the money invested easily represents a gain during the year of about \$5,000,000, making a total of \$15,000,000.

Proved by Registrations

People not closely identified with the motor industry cannot very well grasp these figures, and many of them are apt to say they are exaggerated. However, one cannot go back of the registrations at the highway commission, and there were registered 23,900 cars for the year. That took in the entire state, of course, but when it is considered that of the entire population of the Bay State more than one-third or close to one-half the people live within a short radius of Boston, then one can figure that at least a third of the cars sold must have been through the Boston deal-

ers. Then, again, some of the Boston agencies have the entire New England territory and sell cars all over the six states.

Many of the Boston men went to the New York shows and shortly after the first of several new cars were given representation in Boston. The Inter-State was among the earlier ones, and this was taken on by the S. M. Supplies Co. V. A. Charles, who had been manager of the Rambler in Boston, was made manager of the company. The Regal was another that made its bow early with the Lowe-Dykeman company. Then came the Velie, that was handled by the Kilbourne-Corlew company. W. S. Jameson took on the Selden. The Herreshoff also was a newcomer, and this was taken by the Ferd French company. The Boston show brought others to Boston. The Hupmobile was taken by H. F. Sparrow and the Mora by G. H. Proctor. The Middleby was signed by the W. M. Bean company. Other cars that came in at different periods were the Black Crow, taken by the Hub Renting Co., the Darracq by C. H. Whitecomb, the Empire by the S. M. Supplies Co., the Croxton-Keeton with L. F. Witherell as manager, the Palmer & Singer by F. H. Dike, the Austin by Evans & Warren. An Italian car, the Scat, also will be represented before the year is out. The Isotta also was added to the Hub colony by George T. Gould. The Fuller was taken on by E. P. Blake, and the Midland made its entry. The Hudson was another newcomer and the Whitten-Gilmore company took it on with its Chalmers-Detroit, dropping the Thomas.

In the shifts and changes some cars that formerly were represented in Boston but had dropped out made their reappearance. There was the Rainier welcomed back again as a branch. The Pierce, formerly the Pierce-Racine, once handled by L. B. Butler, is now in with Volney Jacobs of the Allen-Kingston. The Oldsmobile and Oakland were combined into a single branch during the year, having formerly been handled as agencies by different men. The Regal was shifted from the Lowe-Dykeman firm to one represented by A. W. Mutty, and the Midland is now under the Lowe-Henderson wing, a new firm. The Haynes, formerly handled by C. S. Henshaw, is being taken care of by the Castle brothers, while Mr. Henshaw is manager of the newly-established branch of the Thomas company, the Thomas having been an agency of the Whitten-Gilmore company. The Apperson was another that figured in a change. It had been represented here once by Fred Smith, but lately it was taken on by L. B. Russell. The Brush, handled by the S. M. Supplies Co., was until recently looked after by the

South End Motor Car Co. The Kilbourne-Corlew company gave way to the Corlew-Coughlin company in handling the Velie.

There was a change in the Jackson, too, for H. S. Merry gave it up and the Stevens-Sowers Co. took it on. The Pullman, which had been handled by W. E. Shafer, was dropped by him when he went out of business and the Hub Renting Co. took it on. The Glide also was dropped when Mr. Shafer stopped business. The Stearns had been handled by Morgan Kent, but he also went out of business and so J. H. MacAlman, president of the Boston Dealers' Association, took it on. The Hotchkiss went unrepresented when Mr. Kent quit. The de Luxe, formerly handled by H. C. Stratton, was taken on by Donald McVichie. The Marion also came to Boston after an absence of a couple of years, being taken on by B. F. Blaney. When H. F. Sparrow discontinued business, that threw the Grout and the Hupmobile out of representation, and they still are without agencies in Boston. The Curtis-Hawkins company decided to drop the Chadwick, and the reorganization of the Auto Motor Co. caused the Pennsylvania to be discarded. The Pittsburgh Six also was passed up by its agency. There was a change in the Welch agency, too, Mills & Kennedy dissolving partnership, but the car still is on the list of Boston agencies. C. A. Glenworth, a noted English driver, came to Boston to represent the Napier and a plan was arranged to have the English company buy out the local Napier corporation.

Commercial Growth

There is a noticeable tendency in and around Boston to increase the public service by using motor vehicles. Chief Mullen of the fire department uses a motor car, and at least three of the district chiefs have them. The police department has half a dozen machines. The city and Massachusetts hospitals have motor ambulances, and others have been ordered. The park department has a few cars. The water department has a specially-constructed emergency wagon, and the Boston protective department has a couple of motor vehicles. There are at least three motor mail wagons. These are all under municipal or federal control in the city itself.

Hull, Brookline, Brockton, Revere, Worcester and Springfield, the four former within the area of Greater Boston, have put in motor fire and chemical wagons within the past year. Malden and Milton, also in the area named, have ordered similar wagons. In Boston alone there are today hundreds of motor vehicles, the increase during the year being marvelous to the observant citizen. Banks, florists, newspapers, restaurants and other lines of business that one would think would be the last to install them, are among the first to see the advantage of them. There are many big vans used by furniture firms, the Edison electric and the New England Telephone Co. The trucks used by the latter are so arranged that the motor also acts as a sort of donkey engine to raise

poles when they are being planted for wires. Sightseeing wagons carrying forty or fifty are more numerous than ever, and now they make rather extended trips, some of them going out over the historic Paul Revere route to Lexington and Concord.

Under the head of commercial vehicles come the taxicabs. There has been a wonderful increase in the number of these cabs during the year, so that now from about seventy-five a year ago there are more than 200 in and around Boston. In keeping with other reforms, too, the state has tested and sealed the meters of the cabs, and ordered that all attachments for registering shall be connected to the front axle. The two concerns operating the greater number of machines use Berliets and Thomas cabs. There are some Atlas cabs in use, too. A number of carriage men have discarded their horses and cabs for taxicabs.

Real Estate Benefited

The motor industry has been a great aid to the development of real estate in Boston, particularly in the Back Bay section. A few years ago one of Boston's big merchants stated that in 20 years the trend of business would change the aspect of Boylston street until it became a retail center. That was before the motor industry began to boom. The change has come sooner than he anticipated and to a greater extent. It is really surprising to see the new buildings or the new fronts that have been placed on houses, turning dwellings into business places.

Of the new buildings erected during the year the most costly is the big garage erected by Alvan T. Fuller for Packard and Cadillac cars on Commonwealth avenue. This easily represents an expenditure of \$250,000. The Goodyear company had a new home built for itself on Boylston street that is five stories high, and the Goodrich company has followed suit, the new place being nearly finished now. The Maxwell people bought a big building on Massachusetts avenue that with some alterations made a splendid garage, the price going into the hundreds of thousands. The Volney Jacobs company secured a new garage on Newbury street, near the White place, and the Coughlin-Corlew company had a big downtown building reconstructed for a salesroom and garage.

On Columbus avenue a large place was erected for the Detroit electric, and the Locomobile company moved into a new building at Copley square. The Buick company had a new garage built, too, and one now is being planned for the Peerless that will be a splendid addition to Boston business buildings. J. W. Maguire is having a garage built across the river in Cambridge for Pierce-Arrow cars, and J. W. Bowman is to have one near by for Stevens-Duryea cars. The Thomas branch is looking for a new building to use for both a salesroom and a garage, and so is the Royal Tourist. M. H. Gulesian, who built the Copley square garage, also is building another big

BOSTON STATISTICS

Estimated capital invested	1908	1909
.....\$10,000,000	\$15,000,000	
Total sales in 1908.....	7,000,000	10,000,000
Cars sold	3,500	5,000
Makes represented	65	82
Agencies	31	55
Branches	14	21
New branches opened..	1	9
New agencies	8	24
Branches discontinued..	1	0
Agencies discontinued..	13	9
Taxicabs running	75	200
Supply houses	52	60
Miscellaneous concerns.	45	65
Cars registered in state	17,000	23,900

one in Cambridge. In addition to these a large number of new garages have been built for repair men, not to mention the number of buildings that were reconstructed for these purposes.

The big fire in Boston in January, when the garages of a score of the local dealers were wiped out, caused many of them to hustle around and lease new places. It was hard to get locations, too, and that caused owners of property to see the advantage of reconstructing buildings for this purpose. Rents went up as a result, and today millions of dollars are paid annually by men identified with the motor industry for salesrooms and garages hereabouts.

Tires Represented

The tire makers find New England one of their best fields and so Boston is the headquarters for all the standard makes. That the tire companies have done well here is shown by the manner in which they have had to increase their quarters from time to time. Both the Goodyear and the Goodrich had to get entire buildings right in the heart of the motor colony. The Michelin is well located on Boylston street, and in fact all the tire places are convenient to the trade. Beside those mentioned there are represented the Ajax, Bailey, Continental, Diamond, Dow, Empire, Firestone, Fisk, Federal, G & J, Hartford, Morgan & Wright and Pennsylvania.

The electric field is being developed, but this is not making very great strides. There are not many electric pleasure carriages seen around Boston, and while there has been some increase it has not been so marked as to be noticeable. The commercial vehicles propelled by electricity have increased somewhat, and with the erection of more garages where repairing, charging, etc., may be done under a contract system at so much per year the results may be better. The electricians represented in Boston now comprise the Studebaker, Waverley, Bailey, Detroit, Baker, and Rae.

There has been a gradual increase in the accessory field also. Such concerns as the Jones, Warner and Hoffecker speedometers have their own branches here. The number of supply houses has increased from fifty-two to sixty and in the Boston directory now there are listed sixty-five concerns doing a miscellaneous business affiliated with the motor industry where before there were only forty-five.

The year 1909 marked the passage of a new motor law that went through after somewhat of a fight on the part of the motor interests. Charles T. Terry was brought over from New York, and even with the motor clubs and others working against it the bill finally went through. It had been twice defeated, but this time the bill had powerful backing, and with the governor and the highway commission behind it the statute taxing motor cars according to horsepower went into effect. It does not become operative, however, until January 1. A few of the provisions were effective on July 1.

The cars are now classed in different divisions and with all under 20 horsepower at \$5 the scale increases up to \$25 for the big machines. The operators' and chauffeurs' licenses also expire at the first of the new year and must be renewed annually thereafter. The fines for violating the motor laws will all go to the state for the maintenance of the highways now so it may do away with some of the trap systems that were worked so much in this state.

Boston also went into the regulation business and passed street traffic rules, but it was found after the new motor law went into effect it wiped out the traffic rules as far as motor cars were concerned. But the motorists respected the traffic regulations rather than seek to make test cases of them, for they were seemingly very good and gave the motorists a better chance to get along in thickly traveled streets. The state law wiped out the park regulations, too, but these were afterwards arranged satisfactorily, even to increasing the speed limit from 15 to 20 miles in some parks. The highway commission made it a point to try to maintain uniform speed laws throughout the state by refusing to sanction special speed regulations passed by a number of towns that were seeking to put on low speed restrictions.

Club Activity Decreased

The present year marked a merry little war, in which the Bay State A. A. was the central figure. Early in the year while some of the members were at the New York shows there was a meeting, and because of some conflict that resulted a number of members resigned. Then there was formed the Boston Motor Club. But after some months of inactivity and a number of conferences the atmosphere cleared and there was a merger of the two clubs.

Meanwhile there was not so much doing in the way of sport. The spring endurance run of 1908 was not repeated, and not until June 17 was anything done, when the Bay State A. A. held a series of successful races at Readville. Later on it was planned to hold an endurance run, but enough entries were not secured to justify running the event and it was postponed indefinitely.

However, while there was not much doing in the Hub Bostonians upheld the reputation of the city. Harry Grant of the Hub won the Vanderbilt race and Chapin, Pettingill and Messer won the race from

New York to Seattle, bringing the handsome trophy to Boston. Joe Matson, also of Boston, won the Cobe race. And L. R. Speare, also a Bostonian, was elected president of the A. A. A.

Boston was selected, too, as the scene of one of the greatest motor car tests ever inaugurated when a Maxwell car was driven 10,000 miles in a non-motor-stop run that was a big success. It began March 18 and ended April 26. Boston was also the turning point of the endurance run from Washington held in the fall under the auspices of the Munsey newspapers.

Death of Colonel A. A. Pope

A review of the year would not be complete without mentioning the death of Col. A. A. Pope. He was recognized as the

father of good roads and was instrumental in having the matter put before the country at a time when motor cars were not thought of. Had he not done so there would not have been accomplished so much in the way of fine highways as we now have throughout the east. When the motor industry came into being he was one of the leaders in the newer industry and he did much to aid it. His death in August last was sincerely mourned by thousands throughout the country.

An epoch, too, worth mentioning was the completing of a state highway from Boston clear to the New York state line, the first through trunk road completed by any state. It makes a direct connection between Boston and Albany and eliminates Jacob's ladder.

Banner Year in Baltimore



By A. R. French

BALTIMORE, MD., Dec. 20—One does not have to depend upon the statements of dealers alone to be convinced that the year just ending was the banner one in every line of the motor car business as far as Baltimore is concerned. All that is necessary for the doubting pessimist to do is to look about and he cannot help but see for himself that there is a big increase in the number of cars that traverse the city's streets and suburbs; that there are more new makes of cars in the local field; more new agencies and a great boom in the building of new, modern garages and salesrooms. More accessories and supply houses and tire depots are also doing business at a profit.

In addition to these personal observations there are plenty of figures at hand to back up the statements of dealers to the effect that the year showed up better than any previous 12 months in the way of sales and other particulars. While it is true that these figures are for the most part based on estimates and are not guaranteed to be absolutely correct, they are careful and conservative enough to justify the dealers, owners and other enthusiasts to use them in summing up the status of the industry in the Monumental City for 1909. What pleases those engaged in the trade, too, are the indications for the excellent showing of business to continue right along through the year of 1910, barring, of course, any unforeseen panic like that which hit business generally during the latter part of 1907 and the early days of 1908.

Figures show that at this time there are fifty-six different cars represented in Baltimore; there are forty-two garages, thirty-two salesrooms, twenty-nine agencies, twenty-four accessories and supply houses, fourteen entirely new salesrooms and garages combined, twelve new makes of cars, nine new agencies, ten tire agencies, six new accessories and supply

houses, four new salesrooms exclusive of garages, three new tire agencies, five branch houses, two branch houses abolished and cars they represented placed in the hands of agencies, two taxicab companies, two colleges and two factories.

In summing up, these figures show a total increase in the cars represented here of twelve. The total of salesrooms over last year is eight; the total increase of garages is twenty-three; total increase of agencies ten, and a decrease of two branch houses. What helped to increase the total garages was the establishment of a number of these places for hiring purposes, while some of the companies that have erected new buildings have included garages, whereas, heretofore, they merely conducted salesrooms.

Estimate of Business

The only way that any estimate can be made on the amount of business done for the year is by means of registration figures furnished by Secretary of State N. Winslow Williams. These licenses apply to the number of car owners in and out of the state, but as a separate list is kept for those of Maryland owners, who, for the most part, have entirely new cars, an estimate can be reached of the amount of business transacted by Maryland dealers. The registration figures show that since the law passed in 1906 requiring licenses, a total of 7,250 have been taken out by owners in and outside of Maryland. Of this number, 2,887 were obtained from December 1, 1908, to December 1, 1909, inclusive. The number of licenses issued to motorists of Maryland and Baltimore city alone for the year was 1,473. These last figures would indicate about the number of cars purchased for the year throughout the state, including Baltimore city. Placing the average cost of each car at the conserva-

BALTIMORE STATISTICS

Volume of business.....	\$3,000,000
Makes of cars represented.....	56
Number of garages.....	42
Number of agencies.....	29
Number of cars sold.....	1,473

tive figure of \$2,000, it will be seen that the amount of business done is near the \$3,000,000 mark. The total increase of licenses issued for the year ended December 1, 1909, over the previous 12 months is 1,186. The monthly registration was as follows: December, 1908, 85; January, 1909, 91; February, 106; March, 183; April, 356; May, 369; June, 323; July, 321; August, 266; September, 238; October, 317, and November, 232.

Among the new cars that have entered the local field during the year are the Kline, Renault, Reo, Oakland, Hupmobile, Gaeth, Rambler, Rauch & Lang, Premier, Knox, Palmer-Stinger, Simplex. The new agencies are the McMullen and George Motor Car Co., Stearns representative; Dixon C. Walker Motor Car Co., Studebaker; Standard Motor Car Co., Oldsmobile and Cadillac; Charles C. Eckenrode, Crawford; Auto Outing Co., Haynes, Buick, Palmer-Singer and Simplex; M. Griffin, Knox; Auto Equipment Co., Rambler; Little Joe Weisenfeld, Hupmobile, Reo and Oakland; White Automobile Co., White steamer, and the Palace Motor Car Co., representing the Kline touring and commercial cars.

Agency Changes

Among the agency changes noted are that the Stoddard-Dayton Baltimore Automobile Co., dropped the Stearns and took on the Renault, the first and only foreign car to be represented in Baltimore. The Stearns agency was taken up by the McMullen-George Automobile Co., which has the exclusive agency in Maryland. The White Automobile Co. was organized and bought out the White Garage Co., continuing as representatives of the White steamer. The Standard Motor Car Co. now handles the Cadillac and Oldsmobile cars. The Cadillac formerly was looked after by the New Bridge Garage Co., while the Oldsmobile was handled by the local branch of the Olds Motor Works, E. L. Leinbach, manager. This branch has been discontinued. The agencies for the Haynes, Buick, Palmer-Singer and Simplex cars are held by the Auto Outing Co. The last two cars are new in the local field. The Haynes previously was in the hands of the Mount Vernon Motor Co., while the Buick representative was the Mar-Del Mobile Co. The Dixon C. Walker Motor Car Co. has the Studebaker E.-M.-F. agency, the former car having been in the hands of the Auto and Accessories Co. and the E.-M.-F. with the Motor Car Co.

The new combined garages and salesrooms include the Stoddard-Dayton Baltimore Automobile Co., the Ford Auto Co., Dixon C. Walker Motor Car Co., Auto Outing Co., Zell Motor Car Co., Chalmers-

HARTFORD STATISTICS

Number of salesrooms.....	12
Number of dealers.....	21
Number of makers.....	26
Number of cars sold in 1909.....	550
Number of tire agencies.....	14
Number of garages.....	8
Number of supply houses.....	8
Number of factories.....	3

mobile Co., Little Joe Weisenfeld, Michael Detroit and Peerless agencies, White Auto-Griffin, Standard Motor Car Co. and the Palace Motor Car Co. About 2,400 feet of floor space formerly used by the J. A. Rice garage for storage purposes has been converted into a modern salesroom for the Welch, Pennsylvania and Rauch & Lang electric car. G. S. Houghton, Overland representative, has new showrooms at 6 East Read street, while the same is to be said about the Foss-Hughes company, Pierce-Arrow agent, located at 533 North Howard street. The Winton Motor Car Co. has its local branch showrooms now on Liberty street above Lexington. The Palace Motor Car Co. has added modern showrooms to its garage at Mount Royal and North avenues. Charles H. Evans has opened up a large storage garage, known as the Northeastern garage, at Register and Federal streets.

New Buildings Erected

It is estimated that the total cost for new buildings for the year was between \$350,000 and \$500,000. This estimate is reached by averaging the cost of the new combined garages and salesrooms at from \$25,000 to \$30,000, and the smaller buildings at from \$5,000 to \$10,000 each. The exact figures in all cases cannot be obtained because of the refusal of some of the dealers to give them out.

A noticeable feature about the new buildings is that they are, with few exceptions, either located or being built on two of the main thoroughfares of the city—North and Mount Royal avenues. These two main avenues are the most heavily traversed by motor cars, as they lead to Druid Hill park and other important and popular thoroughfares within the city and the suburbs. North and Mount Royal avenues at one point parallel each other four squares away, but at the park entrance they meet, so that the location of the main branches of the motor car industry on these two avenues would indicate that the tendency is to centralize the business here. Most of the other garages and agencies are either on these streets or within a stone's throw of them, although there are several representatives that have their showrooms in or near the center of the city.

Some other features of the industry during 1909 that might be mentioned are that the taxicab business has made a remarkable stride. None of these cars was to be seen a year ago. Now there are two companies in the field and together they operate over fifty taxicabs. The

companies are the Taxicab Co. of Baltimore and Harry L. Stewart. The Taxicab Co. of Baltimore bought out the Belvidere Hansom and Coupe Co. and placed a total of thirty cars in operation. This company has leased Little's stables, on North Howard street, which have been converted into a roomy garage. These cars serve Union station and all the hotels, except the Rennert. Stewart has twenty-five cars of the French Berliet design in service and has converted his livery stables on East Eager street into a modern garage, representing an outlay of \$80,000.

Two liverymen have abandoned their old means of livelihood and are now in the motor car business. Stewart, the taxicab man, is one of these, while the other is Michael Griffin, who, under the firm

name of M. Griffin & Sons, holds the agency for the Knox car.

The Automobile Club of Maryland figured prominently during the year in promoting the interests of the motor car, both from a trade and sporting standpoint, while it also took a firm stand in behalf of the owners of the state. This last move was in connection with the proposed motor vehicle law framed by the state motor car commission. By the club's efforts the exorbitant rates of taxes were reduced to reasonable figures. The club last February conducted for the first time the annual show held in this city, and the exhibition proved the most successful ever held here. It also promoted an endurance run, with the most severe requirements, and this was popular with both the owners and dealers.

Hartford Dealers Satisfied



By W. R. Johnson

HARTFORD, Conn., Dec. 20—The motor car dealers of Hartford are a well satisfied aggregation today and well they might be, for the season of 1909 was the best ever, the high water mark, showing a substantial increase over 1908. Since the local show in February practically every live dealer has done a substantial business. In cases where a dealer has represented three or four lines he has dropped one or two of them as a business proposition and stuck to the best sellers.

During the season of 1909 there has been disposed of by Hartford dealers, approximately, 550 cars. A small percentage of this number was second-hand vehicles. The Packard Motor Car Co. not long ago opened a branch in this city in the Britton building on Allyn street, the local row, so to speak, and since then there has been a good gain in the number of Packards in this city. George D. Knox now has the direct representation of the Peerless. The Lozier, too, is a newcomer and is sold by Brown, Thomson & Co., who took it on after releasing the Packard, carried for the past few years. The Palace Auto Station now carries the Thomas and Studebaker lines and the Waverley electric. The Miner garage has the state agency for the Pierce-Arrow and also carries the Buick. The Knox was given up some time ago. The Oldsmobile and Autocar are no longer represented, though may be soon. These were formerly sold by the Palace station. The Jackson has passed from A. E. Lazarro to A. E. Kilby and Lazarro has taken on the Moline, another newcomer. Leonard D. Fisk has the Chalmers-Detroit and the Locomobile and R. R. Ashwell has given up the Franklin. A. W. Peard has given up the Overland and will enter the high-priced field. Alexander Smith has the Regal. The Stevens-Duryea and the Cad-

illac are sold by Brown, Thomson & Co. The Rambler has changed hands, now being represented by Foster & Co., who have opened up a new store on Allyn street. The Mitchell is handled by the Capitol City Auto Co. and was one of the season's best sellers. R. D. & C. O. Britton have discontinued the Stoddard-Dayton and retained the Maxwell. Charles S. Maslen has the Selden and Louis Elmer the Ford line. A newcomer, though not a pleasure vehicle, is the Chase motor wagon handled by E. O. Springer.

Strictly speaking there is but one branch in this city, that of the Packard under the management of the Packard Motor Car Co. of New York. There are twenty-one dealers in this city engaged in active work and they represent twenty-six makers, though this number is likely to be augmented any day, as many deals are now under way. There are eight garages, an increase of one, the Aswell garage opening up early this spring. There are eight supply houses and fourteen tire agencies handling all makes of foreign and domestic tires. There has been a substantial gain in the receipts of the tire repairing establishments. One new supply house has been opened up this season, that is the Trumbull street branch of the Charles E. Miller Co.

Both the Pope Mfg. Co. and the Columbia Motor Car Co. are busy and at the former establishment there are employed between 1,100 and 1,200 men. The Pope company has done a big business in commercial vehicles, particularly for municipal use such as police patrols and ambulances and fire apparatus. The company not long ago acquired the original Pope tube mills.

The Hartford Rubber Works Co. has done a brisk business and has found it necessary to augment its equipment. The Whitney Mfg. Co. has also found it necessary to increase its facilities and a tem-

porary addition is looked for shortly, followed by a permanent structure in the spring. The Capitol City Foundry Co. is turning out cylinder castings and business shows a good gain over last year. The Blake aluminum foundry has been added to because of the heavy demand for motor castings, most of which are for local consumption. It would take a lot of space to tell about the situation in Hartford, but, in a nutshell, it never was better and 1910 promises to be even better than 1909 and the dealers and manufacturers are preparing for it.

Increase in Worcester



By John B. Wheeler

WORCESTER, Mass., Dec. 19—Although the increase in the number of motor cars in the city of Worcester has been marked during the past year and the two previous ones as everywhere throughout the country, the indications are that the increase will be even more marked with the ushering in of the coming year, 1910, and just where it will end no one at this date can tell. In comparison with all other cities and towns in New England, the number of motor cars in Worcester numbers more than in any of them with but a few exceptions.

It was only about 5 years ago, when there were scarcely fifteen cars, that any real start was made with motor cars in Worcester, and the fact that the number has now increased from that number to 700 in 1908, and to 1,217 for the present year, in the face of some unfavorable conditions for motoring, is evidence of the popularity of the pleasure and pastime of motoring. Massachusetts has a record of about 26,000 cars, of which 1,217 are in Worcester, and this number represents a total capital of nearly \$2,000,000.

There are now eighteen separate agencies in Worcester as compared with eleven in 1908. Some twenty-eight makes of cars now are on exhibition here.

Worcester is now pretty well worked but the outlying numberless suburban towns and those throughout Worcester county, in which many sub-agencies have been established by the Worcester agents still offer a field for the placing of machines, limited only by the ability to secure them from the factories. The rural districts of Worcester have gone motor-mad, the medium grade cars having struck them popular, and sales outstrip those of both high and lower grades. Even transportation is being revolutionized by the advent of motor cars in many towns, and in Worcester the taxicab has about entirely replaced the old cab and stages.

Many prosperous farmers and owners of truck farms about Worcester have come to realize that a motor car is not a luxury for the rich alone, but a convenient and inexpensive necessity for the up-to-date farmer and farm. No better indication

that the eyes of the manufacturers are centered on Worcester could be needed than the fact that at the close of 1908 nine garages existed, and but ten agencies, where at the present time the garages number more than twice last year's number, and the agencies have increased to the extent of eighteen, and within the past 2 months three new garages have been opened and two more are in the process of construction.

While the agencies have increased, as well as the number of manufacturers represented, each and every one of them have record orders for 1910, and all report a prosperous year, and a still better one for the coming year. In 1908 but eleven motor car makers were represented in Worcester, while at the present time over twenty-six of them have agents in the heart of the commonwealth of Massachusetts.

The increase of supply houses during the year have been but few, only four being added to their number, making at the present time seven supply and tire houses in Worcester, but they all are overrun with orders and adding additional room to their plants to meet the demand of the motorists; still there is ample room for several more large ones.

In addition to the manufacture of machinery, specialties, accessories and appliances, which makes the car manufacturers dependent upon Worcester, it is claimed that 75 per cent of the motor car chains in the country are turned out in Worcester, by the Baldwin Chain and Mfg. Co., and besides this Worcester is an important center for supplies.

As a whole, 1909 has been the banner year in the motor car business in Worcester, and not only the largest number of cars of any year has been sold, but many new agencies have entered the field and it is stated that the 1910 year will start with about thirty. It is estimated that at the present time about 1,500 motor cars are now being daily used in Worcester.

Besides the reports from the garages and agencies of prosperous business, no better proof is needed of Worcester's supremacy in the motor car realm than the fact that it had scarcely fifteen owners when a movement was started for the organization of a club, the prime movers of which were J. M. Bigelow, one of the early motorists, and William J. H. Nourse. The organization was brought about successfully in 1904, the city was canvassed for members, and with a membership fee fixed at \$5, a sufficient number was secured to engage rooms at the Bay State house as permanent quarters. The club is an enterprising organization and always has been prominent in the organization of various competitions, its Dead Horse hill-climb being a classic.



WORCESTER STATISTICS

Cars in use in Worcester.....	1,217
Value of cars.....	\$2,000,000
Makers represented	26
Supply houses	7

Omaha Is Prosperous



By Albert E. Parmelee

OMAHA, NEB., Dec. 20—Omaha dealers are closing the most prosperous year in their history. The year 1908 has seen the breaking of all records in the business, in all its branches, as relating to number of cars sold in and out of the city, number of dealers, construction of new garages and the volume of the supply business.

Omaha dealers report an increase in business of 40 to 50 per cent over last year, and all are looking forward to a successful year in 1910, although competition is much increased by reason of the amazing increase in the number of dealers in the last few months. Today there are thirty-one dealers in Omaha, which is 50 per cent more than last year. Eleven of these started in business this fall. A total of seventy-five makes of cars are handled. Ten new garages have been or are now in process of construction and more are being planned for. The retail business has centralized as to location so that west Farnam street is known as the row. On this street within the limits of six or seven blocks, nearly all of Omaha's sales rooms and garages are to be found.

Omaha's importance as a distributing center is indicated by the large sales made throughout Nebraska by Omaha dealers. The total number of cars bought in Nebraska in 1909 aggregates 4,750. Of this number, 2,000 were sold by Omaha dealers. It is estimated that the sales of cars to residents of Omaha alone, amounted to about 350, making a total of about 750 or 800 machines in use in this city.

In addition to the thirty-one car dealers there are four general supply houses in Omaha and one exclusive tire house. One year ago there were but two supply houses. The business of these concerns this year reached the enormous total of \$600,000. Last year their business was about \$250,000, indicating a gain of 140 per cent.

Omaha is the home of two motor car factories, one of which has been highly successful and another, which is about to be constructed on a site recently purchased.

The McKeen Motor Car Co., which manufactures what might be termed railroad motor cars, has achieved an international reputation for its railway gasoline motor cars. Its products are seen on many of the great railway systems of the United States and Mexico and inquiry has come from foreign countries, even far-away Japan. The Rogers Automobile Co. will manufacture a high-wheeled machine.

Omaha is planning to give its annual show in February and by reason of the greatly increased number of dealers and cars, promises to eclipse all previous efforts. The great problem is to find sufficient space for exhibits.

Syracuse Satisfied



W. R. Marshall

SYRACUSE, N. Y., Dec. 18—"Give us more cars and let it be soon," is the cry that goes up in chorus from the eighteen dealers of Syracuse as the season of 1909 draws to a close. Never before in the history of the business in central New York has there been such a demand for cars, and the opening sentence contains the prediction for 1910 business in this locality. Eight hundred cars were sold in this district during the year and 2,200 are contracted for 1910. During the year seven new concerns have opened, of which one, the Maxwell, is a branch. It is estimated that \$100,000 have been invested in the erection of new garages and show rooms, while for 1910 there are plans under way for the expenditure of nearly double that amount already.

With the growth of the business in Syracuse the tendency to centralize is becoming more manifest. Within the last 3 years dealers have located in almost every section of the city. One block on West Genesee street seemed doomed to become the row of the city until a few months ago when the property was condemned for building purposes by the federal government, forcing the present occupants to seek quarters elsewhere. There are at the present time four agencies in this block selling a combined total of ten makes, namely, Buick, Regal, National, Peerless, Cadillac, Ford, Overland, Winton, Pullman and White. As a result of this condemnation, a feeling has been created among the dealers to the effect that they should co-operate with each other and secure some district which shall be known throughout the city as the headquarters of the business and which shall be free from molestation by a transfer of property. Immediately after the first of the year this question will be taken up by the Syracuse Automobile Dealers' Association and steps taken to secure a suitable piece of property for this purpose.

The spring of 1909 saw the first show in Syracuse. Held during the last week of March, it proved to be an unqualified success. More than \$200,000 worth of cars either was contracted for or ordered from the dealers during that week. It was conducted by the dealers' association, which organization will produce another next March, from the 14th to the 19th inclusive. Every indication points to this being as big a success as the one last winter. Evidently it will be central New York's emporium, space in the show being in great demand even now, nearly 3 months in advance of the affair. The dealers' committee is working hard on the plans now.

At the New York state fair last September a number of successful speed events were pulled off by C. Arthur Benjamin, as

OMAHA STATISTICS

Cars sold in Omaha.....	2,000
Cars sold in Nebraska.....	4,750
Number of makes represented	75
Number of dealers	31
Number of supply houses	4

chairman of the committee. The dealers and the club also combined with the car owners of the city in producing a parade for the first night of the Ka-noo-no carnival in which about 200 cars participated.

One of the prominent features of the business in this district at present is the demand for closed cars. Every day dealers report inquiries on limousines, landaulets and town cars and there are more closed bodies seen on the streets of this city in 1 day this month than in an entire season heretofore. The man who can afford it is rapidly becoming to appreciate the comfort and convenience that the closed car affords.

Motor trucks also are in their heyday. The Chase Motor Truck Co., whose factory is in this city, reports a sale of 500 trucks during the present season with the demand not by any means satisfied. This company is growing rapidly and with the opening of the new year intends starting an extensive enlargement campaign. It is the intention to spend from \$50,000 to \$75,000 in building factory additions capable of an output of 2,500 trucks next season.

Another addition to the industry is the plant of the Moyer Automobile Co. at the corner of Wolf and Park streets. At an expense of \$70,000 a new four-story building has been erected and equipped and will open for business on the first of the year. The new factory consists of two buildings, the main one being 150 feet by 60 feet four stories in height and a smaller one 117 feet by 30 feet one story and basement. The plant is owned by Harvey A. Moyer, a carriage manufacturer, and will produce two cars, a runabout and a five-passenger touring car. An output of 200 cars is looked for during 1910.

The H. H. Franklin Mfg. Co., which is located here, has experienced a most successful year. Nearly 2,000 cars have been turned out and the prospects for 1910 bespeak even greater business. In the commercial car line the Franklin factory has big things in view. Its taxicabs also have met with a strong demand and orders are piled high awaiting delivery. Many additions have been made to the plant during the year at considerable outlay of money and there are plans under way for a continuance in 1910.

A total of eleven supply houses in the city report excellent business conditions. This is a 50 per cent increase and speaks well for Syracuse prosperity.

SYRACUSE STATISTICS

Cars sold	800
Number of dealers	18
Number of supply houses	11
Invested in new buildings.....	\$100,000
Cars ordered for 1910.....	2,200

Cincinnati is Strong



G. L. Hussey

CINCINNATI, O., Dec. 18—Cincinnati has gained an enviable place in the motor world of today, just as it has attained a high repute in many other ways that make a citizen proud to own his residence here. Approximately 1,200 motor cars are owned by its citizens. Its beautiful asphalt streets provide splendid motorways for pleasure driving, while its heights and splendid rural roads give chance for recreation on tests of the skill of the driver not surpassed anywhere in America.

Starting early in the commendable enthusiasm evinced by early motorists, Ferdinand Stenger, a local mechanic, constructed an experimental car and exhibited it upon the streets of the city to the amusement and wonder of many. Today the scene is quite different, for 1,500 cars are in daily use by the citizens of the city and suburbs for various purposes, and the city of Cincinnati has its motor police patrol, its motor ambulance and its fire engines driven by motor, and the trend is all in favor of the extension of such public service and such continued use of the motor car where speed, safety, or utility is concerned. Progress has been continuous and rapid in every way, since the first practical car was put into service on the streets of the city. Local problems, many and varied, have been taken up energetically and mastered in a great degree by men who with foresight and determination studied the situation, saw the difficulties in the way locally, secured technical aid wherever necessary, and today the use of the motor car in Cincinnati has attained a definite place at the head of all means of locomotion, for all occasions.

The Ohio State Automobile Association, headed by Harry L. Vail, of Cleveland, now has its secretary's headquarters comfortably located and easily accessible to everyone, in the heart of Cincinnati, presided over by Dr. A. B. Heyl, of this city. The state association now numbers twelve healthy, thriving clubs located at Akron, Ashland, Cincinnati, Cleveland, Columbus, Elyria, Kenton, Lima, Marietta, Springfield, Steubenville and Youngstown, while five others will be soon added to the roster, bringing with them an additional 350 members, making a grand total at that time of about 1,755 active resident members besides many other associate and honorary members, meaning a force destined to bring about a betterment for the motor world, or at least the Ohio division that should not be underestimated.

The securing of a federal motor registration bill, and uniform state motor vehicle laws are among the apparent needs of the motor vehicle owners everywhere according to the views of Cincinnati men at present and it is altogether possible that the Ohio State Automobile Associ-

ation will take a decided interest in securing the attention of the federal law makers to this subject as it will do away with many of the complications met with by Cincinnati and Ohio motorists, particularly as they often cross the several state lines adjoining.

The motor industry in Cincinnati and Hamilton county has had marked growth during the year 1909. There has been an increase of over 30 per cent in the number of commercial enterprises brought into existence in Cincinnati alone by the added interest attached to the use of the motor cars, and appearances would lead to the belief that even 50 per cent would be a moderate per cent that one could rightfully expect to materialize within the year 1910. There are now some 1,200 cars owned by residents of Cincinnati, and as near as can be ascertained between 1,500 and 1,600 owned by residents of Cincinnati and Hamilton county inclusive. Wonderful advance has been made in the matter of planning and constructing buildings intended for the protection and housing of the motor car, salesroom and manufacture of motor cars of various kinds. The Cincinnati building inspector's office records on careful perusal show that during the year 1908 forty-two buildings were built for private and public garages. These cost \$40,025. While so far during the year 1909 this number had increased to ninety-one erected at the cost of \$98,085. These figures being up to December 11 show an increase of 150 per cent for 1909. The percentage of buildings costing \$5,000 or over indicates exceptional interest along this line. One building in particular that now being erected by the Jungclass Motor Co. in Avondale will cost upward of \$30,000. The advance in the number of licenses issued in Cincinnati, 1909 over 1908, is about 40 per cent. A number of the wealthier residents of Cincinnati have built private garages costing from \$2,000 upward and the most prominent architects of this city have organized apartments especially devoted to the motor car industry. The use of the motor car by professional men has met with great favor in the Queen City and it is estimated that a greater number of cars are used for professional calls in this city than any other city in the United States.

Cincinnati has adopted motor cars in eleven departments of public work to date—city engineer's, street repair, city council, electrical department, water works department, street-cleaning department, health department, park department, police department, city hospital department and fire department; using altogether seventeen motor vehicles, ten of which are runabouts, three trucks, two touring cars, one combination police patrol and ambulance, and another the city hospital ambulance. These machines were purchased at an initial cost of \$45,000, while two more runabouts and one truck have been ordered. The police patrol

CINCINNATI STATISTICS

Cars owned in Cincinnati.....	1,500
Garages	92
Value of garages.....	\$138,110

was built at a cost of \$6,500. The city of Cincinnati has taken such a decided liking to the motor car, finding it so well adapted to its street elevations, that it is altogether likely that the next 5 years will see motor vehicles used exclusively. It also is quite probable that an especial garage building will be built for city use exclusively upon the lines of municipal needs, as it is realized by the public officials that the care of such a large number of vehicles could best be accomplished in such a building located in the heart of the city. The city auditor's office is now engaged in gathering data of every description, in regard to the use of the motor car, its cost of maintenance, the facility

with which public work can be proceeded with by its use, etc. In addition to these motor vehicles owned and used by the city, of course, a number of the city department heads have their own cars of more or less service in the transaction of public and semi-public duties. It can therefore be readily seen that the motor car has been recognized by the municipality of Cincinnati as of great value. The salvage corps, while not distinctly a city-owned enterprise, uses three cars in its semi-public service.

The city of Cincinnati discontinued the licensing of cars owing to adverse court decisions December 31, 1908, having licensed 863 motor vehicles up to that time, the license fee being \$5 per annum. It is estimated by City Clerk Edwin Henderson that an additional 400 cars are now in use upon the streets in the city of Cincinnati, making a total of about 1,200 in operation in this city.

Kansas City's Bright Outlook



George T. Bindbuettel

KANSAS CITY, MO., Dec. 20—With such consistent speed is the motor trade developing in Kansas City that it is beginning to be realized that the industry's extent is a fair rival of packing houses, the stock yards and railroads. A little in excess of \$9,000,000 is the 1909 achievement of Kansas City dealers. At the close of 1908 the 12 months' business was gauged at \$3,000,000, so that there has been a 300 per cent gain within the year. The territory that is absorbing all this stupendous quantity of motor cars—some 6,500, according to estimates—consists mainly of the prosperous states of Kansas and Oklahoma, parts of Nebraska and Texas and Arkansas, the western portion of Missouri, and in certain instances, the states of Arizona, New Mexico, Colorado, Iowa, and even as far north as Minnesota.

There are five factory branch houses in Kansas City, the same as a year ago, a half dozen sales companies in which factories hold shares of stock; sixty-eight distinct agencies or branch houses in all. The sixty-eight companies which consummated the sales of 6,500 motor cars this year are compared with thirty dealers in December, 1908, with a credit of 2,800 cars in sales. Eleven tire houses, one more than last year, have about \$1,000,000 worth of business on their books for the year against \$400,000 of last year. These tires are now handled in Kansas City by exclusive

branch houses: the Fisk, Ajax, Firestone, Michelin, Diamond, Goodrich, Regent and Ferromatic. Of supply houses there are eight against five last year. Over ten of the motor firms carry complete supply stocks, however.

Since last December, thirteen new buildings have been erected for motor salesrooms and offices and nine more are now in construction. The occupants of the thirteen new homes with addresses are as follows: E. P. Moriarty & Co., 1508-1510 Grand avenue; Midland Motor Car Co., 1523-1525 Grand avenue; Great Western Automobile Co., 913 East Fifteenth street; Cartercar Co., 911 East Fifteenth street; the Moon Car Co., the Lake Motor Car Co. and the Franklin Motor Car Co., 3324-3326 Main street; vacant, 3328-3330 Main street; and the Greenelase Motor Car Co., 3332-3334 Main street; Boyd Automobile Co., corner Thirty-first and Main streets; the E. R. Hunnewell Motor Car Co., 3636 Main street; the Royal Auto Livery Co., 1114 East Thirty-third street; and Bruening Brothers Automobile Co., Armour boulevard and Broadway.

Of the buildings that are under way, the Rambler Automobile Co. and C. A. Post, agent of the Kissel, have promises of contractors to have the occupancy of a double two-story place at Fifteenth and Harrison streets by January 1; the Velie branch is building at Thirty-third and Main streets; a wealthy man of Kansas City is putting up a three-story building on the southwest corner of Sixteenth street and Grand avenue, which he has not leased as yet and which has foundations that will bear a tall building. The Maxwell's fine new three-story home at 1612-1614 Grand avenue practically is complete except the interior finishing; the Old-Oakland

KANSAS CITY STATISTICS

Volume of business.....	\$9,100,000
Cars sold	6,500
Branches and agencies.....	68
Cars represented	104

Co. hopes to move into its spacious first floor of a three-story building at 1512-1514 Grand avenue within the next few weeks. Another motor show room in this unfinished building that Old-Oakland is to move into has not yet been leased; the Goodrich Tire Co. will be in a two-story building of its own by next spring at 1007-1009 East Fifteenth street. There are a dozen cases through the year of buildings being remodeled for motor sales rooms.

A condition that easily attests the activity of the motor trade in Kansas City is the existence of two dealers' organizations, the Kansas City Automobile Dealers' Association and the Motor Car Trade Association. Both sides are promoting shows in Convention hall—the Motor Car Trade Association the week of January 17 and the Kansas City Automobile Dealers' Association the week of February 28.

But with all the vast clearance of cars through Kansas City dealers a relatively small portion goes to the city. A home-building boom is on in Kansas City and it

is thought that the heavy investments in real estate and building materials have stultified the motor trade. Kansas City's hills are no bar to sales.

With a membership of 460, the Automobile Club of Kansas City is quite a respected organization, but has exercised little initiative toward the advancement of motoring, excluding the participation in the annual Kansas City Star trophies tour. Fifty-five cars started on a 5-days' circuit through Junction City, Kan.; Lincoln and Omaha, Neb., and St. Joseph, Mo.—a distance of about 800 miles.

Forty pleasantly situated acres for a clubhouse site and, perhaps, a small golf course are now the property of the Automobile Club of Kansas City. The tract lies about 20 miles southeast of Kansas City on a good rock road and near railroad and street car transportation. Plans have been drawn for the building—a rest home of the bungalow type—and it is expected that members will be enjoying outings at their own home next spring.

by most of the Columbus agencies in central Ohio is taken into consideration. At least preparations have been made for that volume of business and there is nothing at the present time to indicate that the calculations of the agencies are very far off from the truth.

The allotment of cars for the Columbus agencies, including those to be sold through the sub-agencies in surrounding counties, numbers about 3,000. To this must be added the number which many factories will probably be called on to apportion to the Columbus territory, in addition to the number now allotted.

Advance sales on the books of the local agencies, for deliveries early next year, are exceptionally large. Figures secured from agencies show that up to December 4 exactly 389 cars had been contracted for by Columbus and Franklin county people. To this number should be added about 200 more, which represents the advance contracts from the territory tributary to Columbus. Prospective buyers are appearing every day at the Columbus agencies in order to investigate the relative advantages of the various makes.

The building of structures specially designed for motor car agencies and garages has been one of the main features of motor development in Columbus. During the year many changes have been made where old and unsuitable buildings have been replaced by new structures or where the agency moved into specially constructed homes. The Studebaker branch house occupied its new building at 264-266 North Fourth street early in September. Previous to that time it had no special location. The Maxwell-Briscoe Columbus Co. occupied a new building at 58 to 62 East Spring street late in the year. The structure was remodeled especially for the agency. The F. E. Avery Co. erected a large addition to the garage and salesrooms at 1199 Franklin avenue. The addition more than doubled the capacity of the plant and provides for the increase in business.

The first tendency to localize the industry in a certain part of the city appeared the latter part of 1909. Caleb L. McKee, who owned a large lot on the southeast corner of Spring and Fourth streets, erected a special block to accommodate sales agencies. The building was completed recently and four agencies moved in before Christmas day. They were the Speedwell, represented by Kimmell Brothers, of Dayton, Ohio. The number is 170 North Fourth street. The Franklin Motor Car Co., of which F. H. Lawell is general manager, moved into the room at 174 North Fourth street with the Franklin and Reo. He also will handle the Allen-Kingston. The Charles Schiear Motor Car Co. Columbus branch moved into the corner room at 178 North Fourth street. The concern will handle the Hupmobile and Velie. In addition the American Auto Co., of which C. W. Cain is general manager, moved in with the Charles Schiear company to represent the American in the territory.

Situation in Columbus, Ohio



J. W. Lehman

COLUMBUS, O., Dec. 19—The year 1909 was one of great development in the motor industry in and around Columbus. Not only was there a great increase in the number of cars sold and in the prospects for the future year, but also there was a wonderful increase in the number and importance of the agencies and branch houses. The greatest development may be said to be in the agencies and in the fact that a number of new buildings have been erected to house the garages and sales agencies.

At the beginning of the year 1909 cars were sold at but twelve different places in Columbus. As the year passed, however, the number of agencies were increased and at the close the number had practically doubled. The number of makes represented by agencies in Columbus at the beginning of the year was but twenty-five and a number of the agencies were not very active in pushing certain of the makes. At the close of the year forty-five different makes were represented in the Columbus agencies and branch houses, with a likelihood of that number being increased before the active spring season starts.

Practically no branch houses or agencies ranking as branches were in existence in Columbus at the beginning of 1909, while at the close at least three branches were established. A number of changes were also made in the garages and repair houses with the result that they have been increased 25 per cent.

The number of cars sold during 1909 was of course a large increase over the sales of the previous year, because in spite of the fact that the year was not one of the best as far as general business conditions are

concerned, motor car sales were quite large over the country. It is believed that the number of cars in use in Franklin county, which really represents Columbus, at the close of the year 1909 was fully 60 per cent more than the cars used at the close of 1908. The records of the state motor car department show that 1,375 cars were registered by owners in Franklin county during the year 1909.

Most of the cars registered from Franklin county and operated on the streets of the city during the year were purchased from agencies having their location in Columbus. The few that were not were probably counteracted in the number of cars sold by Columbus agencies which were for use in places distant from the Buckeye capital. Thus it is seen that the business done by Columbus agencies is represented by 1,375 cars.

The prospects for the coming year are most flattering. Statistics compiled with great care from the two dozen Columbus agencies show that fully 1,800 cars will be sold for use in this immediate vicinity and that number will in all probability be swelled to 3,500 when the territory covered

COLUMBUS STATISTICS.

Capital invested in Columbus.....	\$1,208,000
Car sales in Columbus, 1909.....	\$2,216,525
Number of cars sold.....	1364
Makes handled	35
Number of branches.....	3
Number of supply houses and tire repair plants	7
Number of garages without agencies	9
Number of accessories factories....	5

Pittsburg Agents Are Elated



PITTSBURG, PA., Dec. 19—The year 1909 has been a winner in Pittsburg. The motor car business is more firmly entrenched in popular favor here than ever before. It has made steady and rapid strides during the past 12 months and the totals furnished this week by dozens of concerns show that the year just ended is in all ways much the best 12-month period which Pittsburg ever has seen. True, it opened in the midst of a season of doubt and business perplexity. Although the general business sentiment last January was set toward improvement yet no one dared say just when or in what degree this improvement would come. Hence, a certain amount of timidity and hesitation was manifest in the business all the way from the manufacturer and wholesaler down to the man who was considering the purchase of a \$600 car.

It took several months to dissipate this feeling. Winter and spring trade was fairly good but not up to what was expected by some dealers. It became evident, however, in midsummer that the demand for cars of every description was going to make new records before the close of the year. Urged on by this intuitive knowledge, big manufacturing concerns arranged to locate new branches or agencies in Pittsburg, local firms began to make plans for new garages or for enlarging their old quarters, new concerns got their charters and began to hustle for new agencies and there was a general readjustment of sales concerns. Following this, the fall business opened up with a rush.

Fall Business Is Good

Since September 15 no concern in the city has had any fault to find with business. Demand has been excellent on all hands and the shipments of cars from manufacturers have been allotted to sub-agencies quite as fast as they arrive. Today there is an air of genuine prosperity prevalent among the motor car concerns all over Greater Pittsburg. The officials of these concerns are wearing a broad smile of anticipation which they explain by saying that 1910 is going to bring to them a measure of prosperity never known or hardly hoped for in this city before. In brief, Pittsburg, which was hit worse than any other big town in the country in the panic of 1906 and 1907, has recovered itself. Its business conditions today are above normal in most respects and to this fact the motor car industry here looks for thorough confirmation of its faith in next year's sales.

Pittsburg agencies have sold more than \$4,000,000 worth of motor cars since January 1, 1909. Some very interesting features are to be noted in 1909 business. These may be enumerated in brief as follows: First, the number of cars sold; second, the

H. A. Lane

strong tendency toward low-priced cars; third, the big gain in the suburban and country business; fourth, the rapid shifting of agencies and the establishment of new branches and agencies; fifth, the large sum invested in new plants.

The most conservative estimate advanced by leading dealers as to the total number of cars sold this year through Pittsburg agencies is 1,500. Some make this total 2,000. It is a well-known fact that several of the largest agencies in this city have sold from 100 to 350 cars. The Buick Motor Co. actually has delivered the latter number of cars since January 1. The Maxwell agency also is credited with sales running up toward 300. The Standard, Pioneer, Hiland, Winton, Keystone and the Oldsmobile people all have sold from sixty to 125 cars each. The forty remaining sales agencies in Greater Pittsburg probably will average at least ten cars each, many of them having sold from twenty-five to forty. Most Pittsburg concerns have sold more cars than in 1908. Several of the largest branches and agencies report that they have already sold more 1910 cars than their total sales of 1909 cars and the season is far from ended. Sales of new cars and by new agencies have been especially good, showing that the old concerns—while they have a strong following—will have to get out and hustle for business the coming year.

The country trade has greatly swelled the sales in these lower-priced cars. In the thriving towns of western Pennsylvania, eastern Ohio and West Virginia, which are governed by Pittsburg branches and agencies the popularity of cars costing not over \$2,000 has been evinced more forcibly this year and local agents at these points are clamoring loudly for larger allotments. In short, the sales records of 1909 show these facts. First, that the phenomenal gains in buying in Greater Pittsburg have all been in the lower-priced cars. Second, that notwithstanding this tendency the high-priced cars have a little more than held their own in the number sold and the total of these sales is still more than 50 per cent in cash of the grand total of the year's business.

Country Agencies Established

The year 1909 has shown a surprisingly large number of country agencies established from Pittsburg headquarters. Two

or more Pittsburg branches now cover thoroughly every county in western Pennsylvania, eastern Ohio and northern West Virginia. A half-dozen big concerns have well established agencies in Washington, Waynesburg, Connellsville, Uniontown, Greensburg, Johnstown, Butler, New Castle, Sharon, Coraopolis, in the Ohio river towns and in the county seats of all counties in the three eastern tiers of Ohio, and also in Wheeling, Parkersburg and Moundsville, W. Va. These agencies have been doing a splendid business. In fact, their sales during the earlier part of the year helped out very much the comparatively poor showing which Pittsburg concerns would have been obliged to make had they depended entirely upon local city trade. The country buyer is a large and prominent factor to be considered in 1910 business. Not only business and professional men in these busy towns are buying cars in large numbers but the wealthy farmers who have found their money in coal, gas, oil, limestone, timber and splendid markets for their products are taking to the motor car and selling their \$800 to \$1,000 teams. It is altogether probable that country sales next year will be at least 50 per cent larger than the year just closing.

Many Changes Noted

There has been a scramble for business in Pittsburg which has led to a wonderful change in sales concerns here. Manufacturers have at last awakened to the possibilities of placing their cars in this district and they are falling over each other in their efforts to get branches or good agencies here. The Buick Motor Car Co. has taken the lead in this matter. Its delivery of 350 cars this year at an average of \$1,300 each in Pittsburg, western Pennsylvania, eastern Ohio and West Virginia shows what can be done. Prior to February 1 this company had its agency with the Diamond Automobile Co. Its sales since that date increased so rapidly that it proceeded to buy a large site at Baum and Euclid streets and to erect a four-story building 80 by 90 feet at a cost of \$55,000.

The Ford company also has established a Pittsburg branch in the new Rittenhouse building on North Highland avenue, and is making splendid headway. The Royal Tourist people, it is reported, will establish a branch here shortly. The Studebaker company likewise saw possibilities in Pittsburg and established a branch under the Pittsburg baseball grand stand at Forbes field, which is one of the best-equipped plants in this city. The Franklin Automobile Co. established a branch here last year and is meeting with fine success. The White company established its branch over a year ago, but this has been practically its first year in business here.

Among the new agencies which have been established the past year are the Croxton-Keeton agency; the Oakland agency, with the Bellefield Motor Co.; the Haynes car, with the Central Automobile

PITTSBURG STATISTICS

Volume of business.....	\$4,000,000
Cars sold	1,500
Branches and agencies.....	48
New agencies	19
New buildings	\$800,000

Co.; the Baker electric, with the Wilkinsburg garage; the Paterson 30, with the East End Automobile Co.; the Inter-State, with the Arlington Motor Car Co.; the Rauch & Lang, with the Mutual Motor Car Co.; the Reo, with the Premier Sales Co.; the National, with the Pittsburg Speedway Co.; the Brush, with Buhl & McCulla; the new gasoline car of the White company; the Overland and Velie, with the Keystone Automobile Co.; the Autocar and Corbin, with Urling & Co.; the Hudson, with the Pioneer Motor Car Co.; the Everitt and Knox, with the Hiland Automobile Co., and the Gramm-Logan truck, with the H. Lange Wagon Co.

New companies forming has led to the shifting of several important well known agencies in this city. Among these are the Pierce-Arrow, which is now handled by the McCurdy-May Automobile Co.; the Stevens-Duryea, now with the Vestal Motor Car Co.; Stearns and R. & L., with the Mutual Motor Car Co.; Oakland, now with the Federal Automobile Co.; Palmer-Singer and the Simplex, now with the Knickerbocker Auto Co.; the Cadillac, now with the McAllister Brothers Motor Car Co. These changes in agencies have put new life into the business and several manufacturers are going to look over their years' sales and find that Pittsburg has taken more than double the number of their cars which it formerly purchased.

Erection of New Building

Pittsburg has made great advances this year in the building and equipping of thoroughly up-to-date plants. A half-dozen establishments which will do credit to any city in the country have been provided or are now being erected. It is a mighty safe guess that at least \$800,000 has been spent this year for new buildings and additions and improvements to old plants. These are well distributed. While the center of the motor industry continues to be in the east end within practically a stone's throw of the home of the Automobile Club of Pittsburg, yet there have been some splendid buildings erected at a considerable distance from this point. Some very well posted dealers are predicting that the trend of business is going to be toward the business center of Pittsburg, which is 4 or 5 miles from East Liberty, where the bulk of the business always has been done. The big garages springing up on Grant boulevard and around Schenley park and Forbes field are given as proofs of this statement. Some of the best buildings erected this year in Pittsburg are the Buick building at Baum and Euclid; the garage of the Standard Automobile Co. now being built on Grant boulevard; the plant of the Moorewood company on Center avenue; the big building of the E. J. Thompson Co. on Forbes street, near Forbes field, and the establishment of the Pittsburg Taxicab Co. on South Negley avenue. Among other big buildings which are scheduled for early erection are those of the McAllister Brothers Motor Car Co.

Healthy Growth in Northwest



Leroy J. Boughner

MINNEAPOLIS, MINN., Dec. 21—There is only optimism in motoring circles in Minneapolis. Every dealer and every user reflects this spirit. With orders booked for five times as many cars as had been ordered this time last year, with nearly twenty new garages and factories added to the already well built-up row, handling in all seventy-two makes of cars, twenty-four more than last year, and with all the dealers uniting in the annual show, where previously differences had existed—there is good reason for optimism. The condition of the trade in Minneapolis, and that means the northwest, is at least 100 per cent better than it was at the beginning of the year.

The most notable improvement of the year is the great gain in cars ordered for 1910 over those ordered for 1909. A year ago 311 cars had been booked for 1909 delivery. Today there are on the dealers' books orders for 773 cars, an increase of nearly 150 per cent. There were sold to Minneapolis people during 1909 1,082 cars. If the proportion of cars sold to the number of cars ordered at the beginning of the year were to be the same in 1910 that it was in 1909 nearly 3,500 cars would be sold next year. Some dealers are so optimistic that they do not hesitate to make this prediction.

It is impossible to give accurately the number of concerns in Minneapolis engaged in selling motor cars, tires and other accessories, but the number has increased over 50 per cent. Between forty-five and fifty concerns would have participated in the last show, if they had all gotten together; this year they are united, and at the show in February nearly eighty concerns will divide the space of the National Guard armory. These concerns are not of mushroom origin or growth, but are a part of the permanent development of the trade in Minneapolis. The necessity of new firms is shown by the fact that the number of makes handled has increased exactly 50 per cent, from forty-eight to seventy-two, with a corresponding increase in accessories and tires.

Minneapolis is said to supply half the northwest with cars, and this is rather an under statement than an exaggeration. The farmers of Minnesota and the Dakotas are using motor cars in rapidly increasing numbers and these men look naturally to Minneapolis for their supply. Reliable

dealers estimate that there will be 5,000 more cars in use in the three states in August, 1910, than in August, 1909, and of these probably 3,500 will be sold through Minneapolis agencies.

New selling and manufacturing firms mean new business houses and factories and building has kept pace with the growth of the industry. Fifteen new homes have been erected during the year, among them being the garages of the Pence Auto Co., costing three-quarters of a million dollars, the Studebaker company, costing \$150,000, and the factory of the H. E. Wilcox Co., costing \$100,000. The total value of garages and salesrooms is about \$1,500,000, seven of them representing an investment of \$1,120,000. This total is for buildings already constructed or now under construction, and does not include a number for which plans have been drawn or, in some cases, contracts let.

Like most cities, the industry in Minneapolis is concentrating on a motor row. Hennepin avenue from Seventh street to Fifteenth street has nearly a score of salesrooms and garages, one block being devoted almost exclusively to tire agencies. Tenth street and Second avenue south also is the center of a group of motor car buildings within shouting distance of Hennepin avenue.

In all branches of the trade, pleasure, business and truck motor cars, accessories and tires, the growth has been steady and permanent. Different sporting events have stimulated development, but the results of every stimulant, while phenomenal in some cases, have been enduring, and no slump or reaction has marred the record. The coming year is confidently expected not only greatly to exceed the present, but also to show greater increase over the present than the present showed over the last.

Washington Active



By H. G. Ward

WASHINGTON, D. C., Dec. 20—Probably no other line of business in Washington made greater or more substantial strides during the year than the motor car and allied lines. Every succeeding year witnesses the establishment of the industry on a sounder business basis and in this city the caliber of the men who have invested their money in the business of selling motor cars, supplies and the conduct of garages is sufficiently large to rank them among the leaders in the local commercial world. Unlike many cities, Washington has no motor car row, the salesrooms and garages being scattered all over the city. Conditions are not favorable for centralizing the trade. There was a slight

MINNEAPOLIS STATISTICS

Makes handled	72
Value of new buildings.....	\$1,120,000
Number of concerns.....	80
New garages	20
Probable sales in 1910.....	3,500

tendency to establish a row in the vicinity of New York avenue, H and Fourteenth streets, but as rents are increasing in this section, owing to the gradual extension of business from Pennsylvania avenue and F street, it is generally believed that Washington will be without a distinct motor car row for some years to come.

The national capital boasts of twenty-eight motor car salesrooms, which is a gain of nine over last year. Fifty-seven different makes are handled here. There is one tire branch house and ten establishments devoted to supplies. Improvements of a very substantial nature were made in a number of salesrooms, in a number of instances entire new buildings have been erected.

The Miller Brothers Automobile and Supply Co., Ford agent, erected a three-story building and added a big supply department. The L. P. Dorsett Co., with the Stoddard-Dayton, Empire, Kline-Kar, Mitchell and Babcock, doubled its establishment. The Overland Sales Co., handling the Overland and Marion, added another wing to its building and opened a new office and salesroom on V street. The Dupont Sales Co. succeeded the Dupont Garage Co. as agent for the Lozier and Columbia, opening a salesroom at the corner of Thirteenth and G streets, in the heart of the shopping district. The Luttrell Co., controlling the Packard agency, removed into large quarters at 1317 H street. The Wilson Co. remodeled the building at 1333 Fourteenth street and removed from its old quarters at Vermont avenue and L street. The Standard Garage Co. erected a large garage and salesroom on upper Fourteenth street. The above are among the more important improvements that took place during the year.

The year was marked by the opening of two branch houses, one by the Buick Motor Co., at 1028 Connecticut avenue, and the other by the White company at 1124 Connecticut avenue.

It is a difficult matter to get a correct line on the number of cars sold here during the year, as separate registration books for new cars, second-hand cars and cars brought here temporarily are not kept by the secretary of the motor car board, who issues all licenses. A careful canvass of the trade, however, indicates that about 900 new cars were sold during the year. This is a gain of about 450 cars over last year, according to the best dope obtainable. It is significant that the sales of the higher priced cars this year were greatly in excess of those in 1908. In days ago it was said that Washington was a cheap car town, and that the only high-priced cars ever seen here were brought to the city by wealthy people who made the nation's capital their winter home. Today this is all changed and as many high-priced and high-powered cars are sold here as in any other city of like proportions.

India Rubber Importations

WASHINGTON, D. C., Dec. 18—Importations of india rubber into the United States in the year about to end will exceed, in both quantity and value, those of any earlier year. During the 10 months ending with October, 1909, the importations of india rubber, including balata, gutta-percha and gutta-joolatong, reached the record total of \$62,000,000, exceeding by over \$6,000,000 the total for the entire calendar year 1906, the banner year in this feature of the import trade. For the single month of October the imports of india rubber were valued at over \$8,000,000, and should this rate be maintained during November and December, the total for the 12 months ending with December, 1909, would be over \$57,000,000, as against

\$46,500,000 in 1908, \$54,000,000 in 1907, and \$56,000,000 in 1906.

The growth in demand for india rubber, measured by the increase in importations, has been a marked feature of the last 26 years, a period of unusual industrial expansion. Indeed few, if any, of those raw materials for which the United States is dependent upon foreign countries for its supply show a growth as rapid as that of india rubber importations. This increase in the value of india rubber imported is due in part to the advance in price following the enlarged demand in various parts of the world, and especially in the United States, which consumes fully one-half of the world's output of india rubber. Thus, while the quantity of india rubber imported has increased from 32,000,000 pounds in 1889 to 55,000,000 in 1899 and 73,000,000 in the 10 months of 1909 for which figures are available, the average import price has advanced from 39 cents per pound in 1889 to 60 cents per pound in 1899 and 80 cents per pound in the elapsed months of the present year, while for the single month of October the average import price was practically \$1 per pound.

The import price of the crude rubber brought into the United States during the 10 months for which figures are available has exceeded that in any earlier year, having averaged 80 cents per pound in the period in question, while the highest annual average in earlier years was 78 cents per pound in the fiscal year 1906, 76.6 cents per pound in 1907, and 74.2 cents per pound in 1905, the import prices prior to that time ranging from 68 cents per pound in 1904 down to as low as an average of 38 cents

Of the \$62,000,000 representing the importation of the various classes of india rubber in the 10 months of 1909 for which detailed statistics have been completed by the bureau of statistics of the department of commerce and labor \$58,500,000 represented india rubber proper; \$2,000,000 scrap rubber, fit only for remanufacture; \$1,000,000 gutta-joolatong, an article similar to and mixed with rubber for use in various industries; \$357,000 balata, and \$123,000 gutta percha.

Brazil is the chief contributor to the india rubber supply of the United States, the quantity imported from that country in the 10 months ending with October amounting to 34,000,000 pounds, valued at \$30,500,000; while the United Kingdom contributed, presumably from its African and East Indian colonies, 9,000,000 pounds, valued at \$10,500,000; Mexico, 15,000,000 pounds, valued at \$5,500,000; Germany, 4,333,000 pounds, valued at \$3,500,000; other Europe, 6,666,000 pounds, valued at practically \$6,000,000; while from the East Indies direct there was a total importation of a little over 1,000,000 pounds, and from Central America slightly less than 1,000,000 pounds.

Among the new agencies established during the year were the following: Crawford and Speedwell, with the Warner Motor Co.; De Tamble, S. D. Waters & Son; Hart-Kraft, American Truck Co.; Locomobile, Standard Garage Co.; Black Crow, Maryland Garage Co.; Empire, Mitchell and Kline-Kar, L. P. Dorsett Co.; Hupmobile and Regal, Wilson Co.; Marion, Overland Sales Co.; Rider-Lewis, Mt. Pleasant Garage Co.; Moon and Rauch & Lang, Motor Sales Co.; Pierce-Arrow, Cook & Stoddard Co.; Palmer-Singer, Lester D. Moore, Jr.; Stearns, Stearns Co. of Washington; Brush, Belmont Garage Co.; White, White Co.; Oakland, Pope Automobile Co. of Washington; Hudson, Motor Car Co.; Flanders, Commercial Automobile and Supply Co.; Mora, John J. Fister. Very few agencies were switched from one dealer to another.

Washington has two motor car factories, the Carter Motor Car Corporation, maker of the Washington, having been established about 2 years ago; while the other is the Washington Motor Vehicle Co., manufacturer of electric delivery wagons, and which was started about 6 months ago.

Commercial vehicles also made big gains during the year. Men in many lines of trade who heretofore could not be interested in commercial cars investigated the proposition and found it such a good one that they immediately installed one or more cars in their delivery service. Washington being essentially a city of retail trade only, light delivery wagons have the call in popular favor. Aside from the several breweries and one or two other lines, heavy trucks are not in much use here. Conditions generally point to substantial progress next year.



WASHINGTON STATISTICS

Cars sold	900
Makes represented	57
Retail salesrooms	28
Car factories	2

Chalmers Is In Full Control

DETROIT, Mich., Dec. 18—An important change, to be effected gradually during the next 6 months, in the operating plans of the Chalmers-Detroit and the Hudson Motor Car companies was announced yesterday. Beginning not later than July 1, these two companies will be owned and operated separately. Heretofore they have been largely owned and controlled by one group of men, the controlling group in both companies consisting of Hugh Chalmers, E. R. Thomas, R. D. Chapin, H. E. Coffin, F. O. Bezner, James J. Brady, Lee Counselman, J. L. Hudson, R. B. Jackson and George W. Dunham. Some time during the spring, according to the announcement given out by Mr. Chalmers and Mr. Chapin yesterday, three of the present Chalmers-Detroit officers, namely, Coffin, Bezner and Chapin, will assume control of and devote their time and attention to the Hudson Motor Car Co., while Chalmers, Counselman, Brady, Ford and Pfeffer will continue with the Chalmers-Detroit Motor Co., Chalmers as president and general manager, Counselman as vice-president and assistant general manager, Brady as second vice-president and factory manager, H. W. Ford as secretary and C. A. Pfeffer as treasurer. G. W. Dunham, the chief engineer of the Hudson Motor Car Co., will assume a similar capacity in the Chalmers-Detroit Motor Co.

The new officers of the Hudson Motor Car Co. will become: J. L. Hudson, chairman of the board; R. D. Chapin, president; H. E. Coffin, vice-president; F. C. Bezner, secretary; R. B. Jackson, treasurer and general manager; E. C. Morse, sales manager. Jackson, who has been treasurer and general manager of the Hudson Motor Car Co. since its inception, will remain with the Hudson company.

The business transaction which makes this shift of the official personnel of the two companies possible, was a very simple one. Chapin, Coffin and Bezner traded their Chalmers-Detroit holding to Chalmers for his Hudson holdings, Chalmers paying a very handsome cash bonus. Thus Chalmers acquires control of the Chalmers-Detroit Motor Co. and Chapin, Coffin and Bezner acquire control of the Hudson Motor Car Co. E. R. Thomas, of Buffalo, remains a stockholder and director in the Chalmers-Detroit Motor Co.

"We were facing a business problem, and we met it in a business-like way," said Mr. Chapin in discussing the announcement. "We have felt for some time that the field of both the Chalmers-Detroit and Hudson companies was so broad that both should be worked to the limit. We decided that a rearrangement of our executive forces was the best thing to bring about the results desired.

"There will be no change in the policy of the Hudson company in its production of cars at a very moderate rate of price,

with the highest possible quality that we can put into them. All of us have the sincerest respect for Mr. Chalmers and his ability, and our agreement is entirely a friendly one. The two companies will aim to work in close harmony to help one another in every possible way in the future."

"It simply is an expedient business move," said Mr. Chalmers. "We reached the conclusion that both companies would develop faster, and all concerned in them prosper more rapidly if there was more concentration of effort along definite lines on the part of some of the officers. It is sometimes difficult in the actual management of two distinct corporations for the same set of men to give each concern the full amount of attention that each one should have, and we felt that the Chalmers-Detroit and Hudson companies each was large enough now to demand the individual attention of its own set of officers. These contemplated changes will not take place abruptly. We shall work into them gradually and naturally, so that the regular operations of either company will not be interrupted. This deal is entirely friendly and will not in any way interfere with our business or personal relations in the future. It is the spirit of our agreement that the two companies, although they will be entirely distinct and operating along slightly different lines, shall continue to work close together and in perfect harmony.

"The policy of the Chalmers-Detroit Motor Co. will not be changed in any way. shall continue to work close together."

The Hudson Motor Car Co. was organized about a year ago, and the Chalmers-Detroit crowd was heavily interested in it from the start. J. L. Hudson, who always has been the largest individual stockholder was elected president, and the company and its product were given his name. The first model brought out was the Hudson 20 roadster. The Chalmers-Detroit Motor Co., although one of the younger companies in the industry, is yet recognized as one of the most important. The E. R. Thomas-Detroit Co. was organized in 1906 and Mr. Chapin was largely responsible for the starting of the company. It was he who made the arrangements with E. R. Thomas to organize the E. R. Thomas-Detroit Co., which was a success from the start. It became the Chalmers-Detroit Motor Co. in July, 1908, after Mr. Chalmers had purchased from E. R. Thomas a large portion of his stock. The first model put out by the company was the Thomas-Detroit 40. In July, 1908, the Chal-

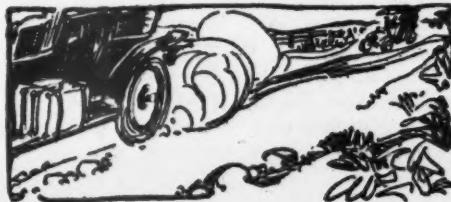
mers-Detroit Motor Co. announced the Chalmers-Detroit 30. This car had been in contemplation for some time and was the result of 2 years' work in designing. Its advent on the market created considerable of a sensation at the time, for it was one of the pioneers in the class of really good cars selling at a low price.

WASHINGTON STATISTICS

Washington, D. C., Dec. 18—In the course of the annual report of the district commissioners it is stated that during the year permits to operate motor cars were issued to 1,784 persons, of which 256 were to operate electric machines, 1,266 to operate gasoline cars, seventy-six to operate steam cars, and 186 to operate motor cycles. Thirty-four applicants were examined and rejected as not competent. Identification tags were issued to 1,167 gasoline cars, fifty-six steamers, 150 electrics, and 311 motor cycles, a total of 1,684, for which a charge of \$2 each was made. The amount thus collected was \$3,368. Eleven tags were issued without charge for vehicles owned by the United States government and the district government. In the estimates for the expenses of the fire department for the coming fiscal year the commissioners included an item for motor fire apparatus. The necessity for such apparatus has been clearly demonstrated, says the commissioner, and the successful operation of such apparatus in fire departments of other jurisdictions indicates that the District of Columbia is backward in this regard. Such apparatus is no longer in the experimental stage, and the commissioners believe that the fire department should be afforded an opportunity to install the same. The commissioners earnestly recommend that congress grant the desired appropriation for this purpose.

TREASURY DEPARTMENT RULING

Washington, D. C., Dec. 18—The treasury department has issued a ruling to the effect that the exportation of motor car tires manufactured by the B. F. Goodrich Co., of Akron, O., with the use of imported leather butts and metal rivets or studs, a drawback will be allowed equal in amount to the duty paid on the imported materials used, less the legal deduction of 1 per cent. The regulations prescribe that the preliminary entry must show the marks and numbers of the shipping packages, and the number of tires of each size contained in each package and in the entire shipment. The drawback entry must show the total number of tires of each size exported, the quantity of imported leather butts and rivets used in the manufacture thereof, and the quantity of waste and value thereof. The entry must further show, in addition to the usual averments, that the exported tires were manufactured of materials and in the manner set forth in the manufacturers' sworn statement filed with the collector of customs at New York.



 <p>Published Weekly CLASS JOURNAL COMPANY 1200 Michigan Avenue CHICAGO New York Office, 239 West 39th Street</p>	 <p>MOTOR AGE</p>	<p>Subscription Rates United States and Mexico, per year, \$3.00 * Other countries including Canada, \$5.00 *</p> 
<p>Entered as Second-Class Matter September 19, 1899 at the Postoffice at Chicago, Illinois, under Act of March 3, 1879</p>		

Commercial Cars Advancing

ARE the days of hammering the commercial car past and gone? From recent events this would appear so, at least as far as certain users of these cars in Chicago are concerned. Three years ago many big concerns of the Windy City had no use for commercial cars, and would not even give them a reasonable trial, but in many cases tried to kill them by abusive use, overloads, too high speeds, and inefficient drivers; but today, some of these concerns are advertising in the press their motor delivery wagons, and bringing to the attention of the buyers the fact that owing to the use of such vehicles for delivery purposes delivery of goods purchased can be made before Christmas eve which with horse transportation would be impossible. This is a signal victory for the motor truck. Nothing will intrench the delivery wagon or the truck more firmly in the hearts of the business world than advertising campaigns of this nature for quick deliveries mean quick sales, sales which the rival maker with the slower horse-drawn vehicles cannot possibly obtain; and sales are money, and money is the root of operation of the entire business world. Every advertisement by a business house of repute, which lays stress on the fact of the speed of its motor delivery system is a big booster for the commercial wagon. It is a long jump from knocking to boosting in a period of 2 short years.

* *

ONE big argument against the introduction of the commercial car has been the poor streets. There have been too many cobble stones, too much broken-up pavement, and too many unimproved thoroughfares. Without the assistance of industrial houses it was an impossibility to bring the attention of the city authorities to such conditions, and little pressure was exerted due to the apathy in many cases of big industrial concerns, and the apparent pro-motoring proclivities of many city hall officials. In 2 short years there has practically been an about face. City officials are now urging the municipalities to purchase cars for use in their respective departments, the police have adopted the motor patrol; the fire department now uses motor hose wagons, motor chemical wagons and a few motor engines; many of the biggest wholesale houses are buying the commercial car in lots of ten at a time; and in fact, it appears as if the great commercial car era has just gained popular footing and that from now on there is good opportunity of a demand for these cars which will prove as much in excess of the present supply as there is in the pleasure field today.

* *

THE slow entry of commercial cars into the big industrial fields has been to a large extent due to the manufacturers of these vehicles. They have not pursued tactics such as the pleasure-car makers have for introducing their wares. There has been but one official commercial test in this country and that was several years ago in the city of New York. Since then makers have followed the expensive method of, in some cases, demonstrating free for 30 days to an individual concern in the hope of making one sale. This was shortsighted policy. Had these makers banded together and secured official tests of their cars it would have cost them no more for a 30-day participation in a contest when the performance of the car would be brought before the entire populace than it did to demonstrate the same length of time for one concern which perhaps made it a stipulation that the figures, such as fuel consumption, car maintenance and merchandise transported, were not to be made public.

The Winter Motor Vehicle

THE last 2 weeks of continuous cold weather has been a good demonstrator to many concerns of the utility of the car for all seasons of operation. Whereas, a few years ago there were comparatively few limousine cars or inclosed types, today some of the makers are having orders for supplying as high as 70 per cent of their regular chassis with special winter bodies. These are entirely for city use, and the reason for this general adoption of the winter body is found in the fact that the business man who during the summer months has become accustomed to being driven to his office in his touring car, is not content in the winter season to have to go back to the slower subway lines, elevated systems, steam roads, or perhaps surface lines. The present inclosed type of car is as pleasant for winter use as the open touring car for summer seasons, and makers who are not devoting their energies to some form of inclosed type of car are actually limiting their selling fields.

* *

UP to the present many have considered the limousine suitable only for the highest-priced chassis. This is far from being the case. There is no reason why the buyer of a \$1,500 car has not as great a desire to use his car in the winter as has the owner of the \$5,000 machine. The \$1,500 man would not expect a limousine body of the same luxurious construction and design as fitted to the \$5,000 chassis, yet is none the less interested in a body commensurate to his needs and in harmony with the chassis. This field has been little exploited, the reason not being definitely known. It is worth while, however, for makers of the \$1,500, \$2,000 and \$2,500 class to experiment with the closed-body proposition, and thereby greatly increase their car sales, because it is a certainty many people will buy if they know of the possibility of having an inclosed type for winter seasons without a too greatly increased outlay.

* *

THE limousine type is not the only solution of a closed body for the medium-priced car. To many the coupe offers a much more attractive field. For the runabout it is specially suited, in that the coupe incloses completely the driver and the other front-seat passenger. Concerns are springing up in the different cities who make a specialty of coupe bodies for different makes of cars, and although at present the expense of these is often 20 per cent of the original car cost there is no reason why certain body combinations can be accomplished so that the additional outlay for the inclosed body will be reduced.

* *

AS stated on this page a month ago, it is possible to make the present touring car body much more suitable for winter use, and thereby increase its selling field. This can be done by fitting some form of heater for the tonneau passengers, the exhaust furnishing the source of heat. The front-seat passengers can be made 50 per cent more comfortable by use of side doors, as high as those on the tonneau, and thus shutting out the cross currents of cold air which are so disagreeable. By a leather or rubber hood or boot extending from the dash rearward an immense amount of comfort can be added. The wind shield is a great comfort providing it is carried rearward nearer the faces of the front-seat passengers instead of perched in the same vertical plane as the dash stands. In other ways the winter riding qualities of the touring car can be greatly improved.

STOCK-CAR RACING PLAN NOT CONSIDERED

PARIS, Dec. 11—America's suggestions for stock-car races has not been adopted at the international conference of Recognized Automobile Clubs. William S. Hogan received the proposals from the Automobile Club of America too late to give the necessary 3 weeks' notice, with the result that the matter was introduced to the meeting but could not be discussed. To judge from expressions of opinion gathered from the European manufacturers the American method has little likelihood of finding favor here. Purely stock-car races never have been held in any country of Europe, speed events here being an opportunity of trying out new ideas and not of testing the standard product. Further, Europe is opposed to a piston displacement rule. Such good results have been obtained by classifying cars according to cylinder bore only, leaving manufacturers to adopt as long a stroke as possible, that it would be impossible to convert the European to a rule tending towards the development of short-stroke engines. William S. Hogan will bring the matter forward again at the next conference, but it is safe to say that nothing practical will come of it.

The most important work of the conference was in connection with an international triptyque. The Touring Club of Italy had proposed, through its spokesman, the Automobile Club of the same country, that an international triptyque should take the place of the numerous national documents now in use. The matter has been before the road conference and the recent government conference and there met with approval. The Recognized Automobile Clubs, in order to help the matter forward to a practical issue, decided that each club should study the matter and present a detailed scheme for the realization of an international triptyque at the February 1 gathering of the conference. At the same time they should use their influence with their respective governments towards the adoption of a scheme having for its object the creation of an international motor car passport. There is no real opposition to the Italian scheme, but there are plenty of objections on the part of officialdom against doing things in a way that is not in accordance with their routine. As the scheme would provide an open door into every country in Europe merely on the accomplishment of a single formality, it is one that is worth working for. America's interest in it is real, for it provides a large proportion of the motorists who travel annually over the highways of the old world.

John Bull has reason to be satisfied with the results of this meeting, for it was decided that the automatic electric timing apparatus in which he is interested shall be given official recognition, and this or a similar type of instrument made compulsory for all races, either on road or

Conference of the Recognized Automobile Clubs Fails to Take Up the American Proposition

track, of less than 5 kilometers distance. Colonel Holden, a member of the Royal Club of Great Britain, invented a timing machine which automatically recorded the passage of a car, and did it so well that the passage of the front and rear wheels were separately recorded at speeds of 80 miles an hour. The machine was proposed for compulsory adoption, but not immediately accepted. Now it has been decided that this method of timing shall be employed wherever it is desired that the records shall have official recognition. In order not to give the English colonel a monopoly the conference declared that any type of automatic machine could be employed provided it was capable of recording $\frac{1}{2}$ second. All these short distance records will be timed in two directions—out and back.

ITALIANS WANT TO RACE

Milan, Dec. 5—Since the fact has been known that there will be no grand prix race in France next year, Italian sportsmen under the leadership of Chevalier Florio have had a number of consultations and are about ready to announce that they will promote a road race in 1910 for racing cars, no restrictions being placed upon them so far as construction is concerned. The cars are to be driven by either professionals or amateurs and each manufacturer is to be allowed three entries. Such a contest would not conflict with the Targa Florio, which provides that owners are to drive their own cars. Furthermore, it would give the sport and trade a much

needed stimulus.—There is no question about the sanction being granted by the authorities as well as by the club officials. The only thing to settle is whether it shall be a 1-day or a 2-day race. If it is to be 1 day the distance will be between 300 and 375 miles, and if a 2-day race is favored, then the total distance is to be 1,000 kilometers, or 622 miles. Chevalier Florio is reported to have promised to donate \$10,000 cash for prizes.

GERMANS OPPOSE SHOWS

Berlin, Dec. 4—That the German motor car manufacturers, or at any rate nearly all the big concerns, are strongly opposed to the holding of motor car shows in Germany was amply shown when at the annual meeting of the Car Builders' Association 95 per cent of the members present voted against a proposition to participate in the international show that will be held in Frankfurt, the one to be held in Berlin and a third one to be held in Munich, all in 1910. Those that were in favor were the small concerns. At the meeting it was decided to appoint a special committee and investigate the case of those members who have taken part, exhibited, at the annual Leipzig cycle and motor car show. As soon as the facts will be on hand suit will be started against these members—manufacturers—in order to have them pay the \$1,250 fine which it had been decided at the previous general assembly would be levied against any member who breaks the show pledge. There were 106 members present and General Manager Fischer, of the Daimler Motoren Gesellschaft, was elected president of the committee. After a discussion concerning participation by members of the association in foreign shows or world's fairs it was decided to let the members do as they please.

TOURING CLUB PROSPERS

Paris, Dec. 5—Yesterday was held the annual meeting of the Touring Club of France. The chairman, in his report, brought out the fact that during the last 12 months, or up to the annual closing time, the club has gained nearly 4,000 members and that it now has very near 120,000 members. The expenses during the business year amounted to \$217,828.82 and the receipts were \$251,042.70, leaving a balance of \$33,213.88 on the profit side of the ledger. During the next 12 months the club has scheduled to spend about \$80,000, of which \$26,000 will be for road accommodations in the mountains, in forests, for various kinds of warning posts or signboards, benches or resting places, etc; \$26,000 will be spent in other ways and also in subventions to club committee while the balance, or about \$28,000, will be used for actual road construction or repairing. Up to date the club has spent a total of close to \$400,000 for road work.

Coming Motor Events

DECEMBER

25-Jan. 1—Show at Columbus, O.
31—Opening of Grand Central palace show, New York.

JANUARY

7—Closing of Grand Central palace show, New York.
8-15—Madison Square garden show, New York.
17-22—Show of Kansas City Motor Car Trade Association.
17-24—Philadelphia show.
24-29—Show at Portland, Ore.
24-31—Show at Washington, D. C.
24-29—Ninth annual Detroit show.

FEBRUARY.

4-6—Mardi Gras track meet, New Orleans.
5-12—N. A. A. M. show, Chicago Coliseum.
14-19—Show at Hartford, Conn.
14-21—Show at St. Louis, Mo.
14-18—Annual show at Buffalo.
19-26—Show at Newark, N. J.
19-26—Inter-mountain show, Salt Lake City, Utah.
21-26—Show at Binghamton, N. Y.
21-26—Annual Cincinnati show.
22-27—Milwaukee show.
28-March 5—Kansas City Automobile Dealers' Association's show.

MARCH

5-12—Boston show.
21-28—Denver Motor Club show.

ZERO WEATHER SLOWS RECORD TRIALS



GOVERNOR MARSHALL LAYING GOLD-PLATED BRICK AT INDIANAPOLIS SPEEDWAY

INDIANAPOLIS, Ind., Dec. 18—It seems doubtful, after the trials on the Indianapolis motor speedway yesterday and today, that midwinter racing, with the thermometer hovering near the zero point will ever prove successful. Still, glancing at the records that have been established during the 2 days, it probably would be unfair to class the trials as a failure. The most remarkable feature of the meet can easily be accredited to Strang with his 120 Fiat, who covered 5 miles from a flying start in 3:17:70, thus establishing a new American record. The former record for the distance was made by Oldfield over the same course last August, his time being 4:11.3.

The trials were the first events over the reconstructed course of the speedway. Since the meet of last August, when there were a number of fatalities, the track has been paved with brick and other extensive improvements made. The events of yesterday and today merely indicate what may be expected from the course under better weather conditions. It was considered remarkable such records were made in the face of heavy wind and extreme cold.

The tests of the track demonstrated that the brick surface is ideal for speed, but that the turns need more banking to permit of a big car like the Fiat running wide open. It was noticed that Strang invariably shut off four times each lap—at each of the four corners—and even at that would skid to the top of each bank. With a little more banking it is thought the track would be capable of a speed of at least 135 miles an hour—the brick is fast enough to stand it. Contrary to general belief, the brick did not work much tire havoc and it is said that on stock cars running up to 80 miles an hour no tire trouble will be experienced.

Drivers in the various events no doubt suffered more than they did last August. At the former meet the difficulty was in small particles of dust and stone flying in their faces and eyes. This time it was the cold that froze their hands and ears and faces; the track itself, according to every man who participated, is perfect.

Attracts Small Crowds

The speedway management had not hoped to make the meet successful from a financial standpoint. The hope was that the year would close with practically all records held by the local course, which would give the Indianapolis motor speedway considerable prestige at the beginning of the 1910 racing season. Yesterday only a nominal admission fee was charged and the attendance was barely 500. Today the gates were thrown open free of charge and the attendance was about 200. What money was derived on the opening day is to be divided among the drivers.

Just prior to the first event Friday an interesting ceremony took place. This consisted in placing the last brick on the course, a metal brick, plated with gold. This ceremony was performed by Governor Thomas R. Marshall, assisted by his private secretary, Mark Thistlethwaite. The brick is placed just at the finish line and is held in place by chains. It weighs about 52 pounds and is said to be valued at \$500. Its laying marked the last of an expenditure of about \$700,000 on the speedway project.

Not an Accident

There was some effort to dissuade some of the drivers from taking part in the trials, as it was feared their frozen hands might lead to accidents. Most remarkably, however, there was not an accident of any kind. Although some of the drivers had to be lifted from their cars after

finishing trials, because they were so cold, they succeeded in guiding their machines perfectly. Not once did the cars show any inclination to run into the 3-foot cement wall that has been built around the course.

All events were merely speed trials. There were no match events. The entries were small and confined largely to Indianapolis drivers, owing to the extreme cold. Exceptions were Lewis Strang, driving his 120-horsepower Fiat; Walter Christie, driving his own freak creation, and Donnelly driving a Packard. Two local concerns made their debut in the racing game, the Cole Motor Car Co. and the Empire Motor Car Co. Both cars showed up well. In two instances they were the only cars entered in their respective classes.

The longest trial was for 20 miles, the remainder being from $\frac{1}{4}$ mile to 5 miles. Usually after driving 5 miles the drivers were quite willing to stop, bathe their faces and hands in the icy water of the stream running along the speedway, and then get warm. Of course the drivers were dressed warmly, wore heavy gloves and had their faces wrapped in woolen bandages, but even these precautions seemed to offer little resistance to the cold and wind. Part of the time the mercury hovered near the zero point.

While there was an utter absence of tire trouble, many of the cars were troubled with imperfect carburetion. Every means known to assure perfect carburetion were used, but even these did not prove successful in all instances. Had there been no trouble from this source it was generally believed still better records would have been made.

Warner Directs Timing

C. H. Warner, of the Warner Instrument Co., had full charge of the timing, as timing director. Mr. Warner had the timing device that gave such good satisfaction at the former Indianapolis meet and also at Atlanta. It worked perfectly, with one slight exception when the kilometer wire was broken. For a short time the kilometer records could not be taken, but the damage soon was repaired.

Without doubt the officials and spectators suffered as much from the cold as did the drivers and their mechanics. In the judge's stand there was a coal stove, but even with this the judges and other officials wore their heavy gloves and overcoats and had their fur caps pulled down over their ears. In the grand stand a few hundred half-frozen spectators danced upon and down and walked in an effort to keep up satisfactory circulation.

The feature of the Friday trials was the showing made by Aitken in a 40-horsepower National, covering 20 miles in 16:18.41, establishing a new record for stock cars of the 451-600 class. Kincaid

20-MILE FREE-FOR-ALL FRIDAY AT INDIANAPOLIS, IN WHICH SEVEN CARS WERE SENT FOR RECORD

No.	Car	H.P.	Driver	Lap 1 2½ ml.	Lap 2 5 ml.	Lap 3 7½ ml.	Lap 4 10 ml.	Lap 5 12½ ml.	Lap 6 15 ml.	Lap 7 17½ ml.	Lap 8 20 ml.
No. 5	National	40	Aitken	2:02.62	4:06.56	6:09.68	8:12.10	10:15.20	12:17.01	14:18.60	16:18.41
No. 4	National	40	Kincaid	2:01.88	4:04.73	6:07.22	8:10.60	10:12.28	Out of gasoline		
No. 9	Cole	30	Endicott	2:40.52	5:20.51	8:01.28	10:41.35	13:22.48	16:02.44	18:41.87	21:22.11
No. 10	Empire	20	Motsinger	3:16.12	6:28.14	9:36.32	12:45.22	16:04.05	19:13.27	22:23.85	25:50.43
No. 6	Marmon	32	Stillman	2:09.12	4:17.40	6:25.68	8:33.10	10:40.60	12:47.10	14:55.15	17:03.74
No. 7	Marmon	32	H. Marmon	2:12.97	4:25.88	6:37.95	8:50.83	11:05.61	13:21.20	15:37.40	17:52.88
No. 12	Packard	30	O'Donnell	2:21.61	4:42.69	7:03.83	9:23.35	11:43.95	13:59.81	16:24.96	18:43.83

started out even better and there is no telling what he might have done had not someone forgotten to fill his gasoline tank. Kincaid covered the first lap of 2½ miles in 2:01.88, and each succeeding lap up to 12½ miles in faster time than any of the other entrants. Shortly after the fifth lap his car stopped and it was discovered he was out of gasoline.

Strang also set a new mile record for the track on Friday, when he covered that distance in :40.61. Today he lowered this record, covering the distance in :39.21, but falling short of his mile record established recently at Atlanta.

Strang Cracks a Record

Today it was seen that it would be practically impossible to attempt any trials for a longer distance than 5 miles, and in the one 5-mile trial that was made Strang and his Fiat set a new mark. Anthony Scudellary, mechanic, worked on Strang's car practically all of Friday night devising some means to keep it warm. In front of the radiator he placed a sheet of leather to keep the cold wind from going back to the carburetor. A hot air pipe was also attached to the carburetor leading from the exhaust pipe and kept the big car from freezing.

Other drivers took similar precautions. Christie had expected to make some wonderful speed during the day, and seemed assured of success when one of his springs broke. He had placed a wager he would travel at the rate of 120 miles an hour during the day.

Strang's 5-mile record was, of course, the fastest time ever seen on the local speedway. He had a flying start of 1 mile. This preliminary mile he covered as follows: ¼ mile, :08.05; ½ mile, :17.82; kilometer, :22.70, and mile, :40.02. The first mile of the first lap was as follows: ¼ mile, :08.92; ½ mile, :18.39; kilometer, :23.36, and mile, :39.36. He covered the first lap of 2½ miles in 1:38.80. Time was also taken for the first mile of the second lap, which was as follows: ¼ mile, :09.02; ½ mile, :18.62; kilometer, :23.52, and mile, :39.66. Total for 5 miles, 3:17.70. The ¼ mile in :08.05 by Strang in the preliminary mile is the fastest official pace ever recorded on an American speedway, being equal to a speed of 112 miles an hour. It also shows the possibilities of brick.

Several motor cyclists, among them Fred Huyek, tried for new records, but encountered practically the same trouble as the drivers of motor cars.

SUMMARY OF FRIDAY'S OTHER EVENTS AT THE SPEEDWAY

EVENT NO. 7—UNDER 161 CLASS						
Car	H.P.	Driver	¼	½	Kil.	Mile
Emoire	20	Motsinger	:08.73	:38.18	:48.31	1:20.46
EVENT NO. 6—161 TO 230 CLASS						
Cole	30	Endicott	:15.69	:31.71	:39.88	1:05.97
EVENT NO. 4—301 TO 450 CLASS						
National	40	Kincaid	:11.80	:22.60	:30.20	:50.00
National	40	Aitken	:11.60	:23.20	:30.20	:49.20
EVENT NO. 3—451 TO 600 CLASS						
Packard	30	O'Donnell		:27.80	:29.20	:58.60
FREE-FOR-ALL—1-MILE TRIALS						
Christie	120	Christie	:08.78	:18.13	:23.91	:47.06
Christie	120	Christie	:09.02	:19.17		:46.22
National	40	Aitken	:14.99	:21.04	:23.13	:50.53
National	60	Aitken	:09.81	:21.08		:45.00
Fiat	120	Strang	:11.60	:21.96		:46.18
Fiat	120	Strang	:09.10	:18.84		:40.61
Fiat	120	Strang	:09.21	:18.86		

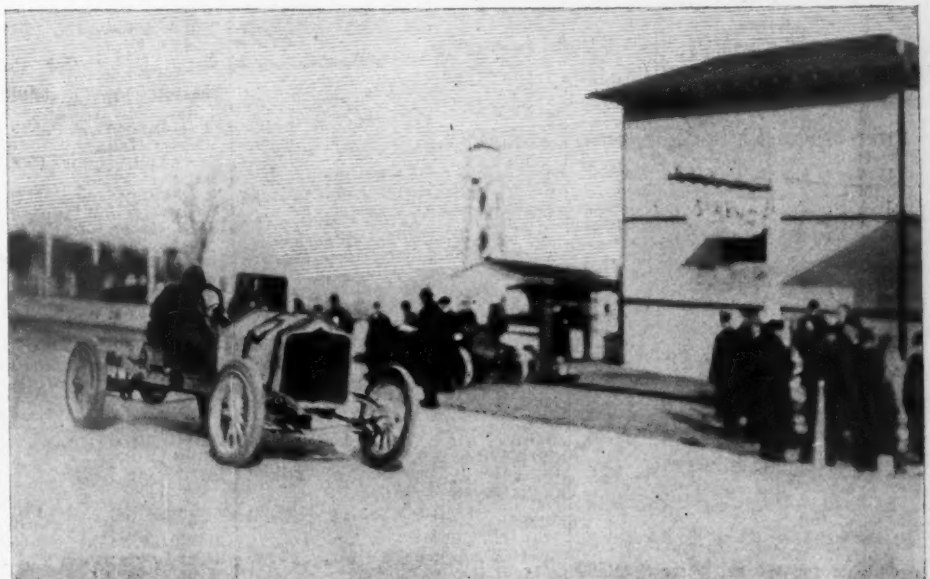
SUMMARY OF SATURDAY'S EVENTS IN WHICH STRANG WAS STAR

FREE-FOR-ALL—1-MILE TRIALS							
Christie	120	Christie	:09.04	:18.11	:24.50	:50.10	
Christie	120	Christie	:08.92	:18.23	:24.50	:42.58	
Christie	120	Christie	:08.87	:17.53	:22.86	:43.03	
Christie	120	Christie	:08.70	:18.08	:23.45	:43.77	
Fiat	120	Strang	:09.07	:18.62	:23.65	:39.21	
Empire	20	Motsinger				1:17.03	
5-MILE TRIAL FOR WORLD'S RECORD							
Car	H.P.	Driver	$\frac{1}{4}$	$\frac{1}{2}$	Kil.	Mile	$2\frac{1}{2}$ ml. 5 ml.
Fiat	120	Strang	:08.92	:18.39	:23.36	:39.36	1:38.80 3:17.70

CAN USE WORD "ANNUAL"

Kansas City, Mo., Dec. 18—Following an application for dismissal by the plaintiffs Judge Park in the circuit court last Wednesday dissolved the temporary injunction against the Motor Car Trade Association restraining it from using the adjective "annual" on its posters, window

cards and other advertisements of the associations' show the week of January 17. The Kansas City Automobile Dealers' Association had objected to the use of the word annual in describing the January show as the Motor Car Trade Association has only been in existence about a month and a half.



AITKEN IN THE NATIONAL IN FRIDAY'S SPEED TRIALS

White and Gold Color Scheme For Madison Square Garden Show

NEW YORK, Dec. 20—While many workmen are busy in the Grand Central palace preparing for the A. M. C. M. A. show, Madison Square garden is not being neglected, for the A. L. A. M. exhibition will open the night of January 8, and already carpenters, signmakers, woodworkers and painters are working zealously on the skeleton work for the decorative creations, on which more than \$30,000 will be expended.

White and gold are the colors that have been selected to predominate in the decorative scheme, although crimson and green also will be strongly in evidence. At the show of last January the employment of plaster statues and other staff work was done away with to a great extent. The forthcoming show will be practically void of this class of ornamentation, and an effect of solidity and massiveness will be produced, together with a feeling of distance, breadth and general roominess. At some former shows the visitor entering the garden was confronted by a mammoth piece of statuary which interrupted the view of the ensemble on the floor beyond. This time a Roman seat, or fountain,

which is not of a height to assert itself offensively, and permits a comprehensive view of the garden, will be constructed opposite the entrance way to aid in the artful plan of "opening up" the interior.

The fountain will have a modest elegance and be in the form of a low abutment of gray stone, curving gracefully about the spaces of those exhibitors that face the entrance on the Madison avenue side. It will have a trough-like basin, and at each end and in the center water from the mouths of griffins and gargoyles will spray upon the pool beneath made iridescent by cunningly hidden lights. The falling water also will be electrically radiant, of course. There will be big and little goldfish and natural pond lilies in the pool, and mingling with the natural lilies will be artificial water plants from which will radiate other vari-colored lights. Carved into the front wall of the fountain will be a long settee for the visitors. Two bay trees will be seemingly growing through this seat.

A fine display of racing trophies will be made collectively and the public will then have the first good opportunity to see

the prizes of which it has heard a great deal assembled all under one roof and in a group. The show committee has arranged to make this display of cups, plaques, medallions, emblems, etc., a feature and a special department of the show. A big case will be provided for the trophies and they will all be ticketed and a pamphlet furnished telling the details of each trophy, its cost, history, etc., and by whom it was won. Big and little, there will be scores of prizes in this loan collection. Prominent will be the classic Vanderbilt cup that was won by Harry F. Grant in the six-cylinder Alco; the Glidden and Hower trophies, both awarded to the Pierce-Arrow Motor Car Co.; the Lozier Motor Co.'s trophies won in 24-hour races; the Indiana trophy, the Massapequa cup, the Merrimac prize and the Detroit trophy, won in the Glidden tour, will be among the many exhibits made by the Chalmers-Detroit Motor Co.; the Dewar cup, awarded by the Royal Automobile Club in its standardization test, will be loaned by the Cadillac Motor Car Co., while the Knox Automobile Co. and several others also have declared their intention to participate. It is quite possible that some of the recently admitted members of the Association of Licensed Automobile Manufacturers, who will not have any cars on exhibition, will be represented at the show in this display of trophies.

OFFICIAL LIST OF EXHIBITORS BOOKED FOR THE CHICAGO COLISEUM SHOW AND WHICH

COLISEUM—MAIN FLOOR

American Locomotive Co., New York
Apperson Brothers Auto Co., Kokomo, Ind.
Babcock Electric Carriage Co., Buffalo, N. Y.
Baker Motor Vehicle Co., Cleveland, O.
Bartholomew Co., Peoria, Ill.
Buick Motor Co., Flint, Mich.
Cadillac Motor Car Co., Detroit, Mich.
Chalmers-Detroit Motor Co., Detroit, Mich.
Columbia Motor Car Co., Hartford, Conn.
Corbin Motor Vehicle Corp., New Britain, Conn.
Dayton Motor Car Co., Dayton, O.
Elmore Mfg. Co., Clyde, O.
Everitt-Metzger-Flanders Co., Detroit, Mich.
Franklin, H. H., Mfg. Co., Syracuse, N. Y.
Haynes Automobile Co., Kokomo, Ind.
Hudson Motor Car Co., Detroit, Mich.
Jeffrey, T. B., & Co., Kenosha, Wis.
Knox Automobile Co., Springfield, Mass.
Locomobile Co. of America, Bridgeport, Conn.
Lozier Motor Co., New York
Maxwell-Briscoe Motor Co., Tarrytown, N. Y.
Matheson Motor Car Co., Wilkes-Barre, Pa.
Metzger Motor Car Co., Detroit, Mich.
Midland Motor Co., Moline, Ill.
Mitchell Motor Car Co., Racine, Wis.
National Motor Vehicle Co., Indianapolis, Ind.
Nordyke & Marmon Co., Indianapolis, Ind.
Oakland Motor Car Co., Pontiac, Mich.
Olds Motor Works, Detroit, Mich.

Packard Motor Car Co., Detroit, Mich.
Peerless Motor Car Co., Cleveland, O.
Pennsylvania Auto-Motor Co., Bryn Mawr, Pa.
Pierce-Arrow Motor Car Co., Buffalo, N. Y.
Pope Mfg. Co., Hartford, Conn.
Premier Motor Mfg. Co., Indianapolis, Ind.
Reo Motor Car Co., Lansing, Mich.
Ricketts Auto Works, South Bend, Ind.
Royal Tourist Car Co., Cleveland, O.
Selden Motor Vehicle Co., Rochester, N. Y.
Stearns, F. B., Co., Cleveland, O.
Stevens-Duryea Co., Chicopee Falls, Mass.
Studebaker Automobile Co., South Bend, Ind.
Thomas, E. R., Motor Co., Buffalo, N. Y.
Waverley Co., Indianapolis, Ind.
Winton Motor Carriage Co., Cleveland, O.
White Co., Cleveland, O.
Woods Motor Vehicle Co., Chicago

FIRST REGIMENT ARMORY—MAIN FLOOR

American Motor Car Co., Indianapolis, Ind.
Atlas Motor Car Co., Springfield, Mass.
Auburn Automobile Co., Auburn, Ind.
Austin Automobile Co., Grand Rapids, Mich.
Berliet Import Co., Chicago
Brush Runabout Co., Detroit, Mich.
Buckeye Mfg. Co., Anderson, Ind.
Cartercar Co., Pontiac, Mich.
Chadwick Engineering Works, Pottstown, Pa.
Dorris Motor Car Co., St. Louis, Mo.
Flat Automobile Co., New York
Gaeth Automobile Co., Cleveland, O.

Holsman Automobile Co., Chicago
Hupp Motor Car Co., Detroit, Mich.
Jackson Automobile Co., Jackson, Mich.
Kimball, C. P., & Co., Chicago
McIntyre, W. H., Co., Auburn, Ind.
Moline Automobile Co., East Moline, Ill.
Moon Motor Car Co., St. Louis, Mo.
Mora Motor Car Co., Newark, N. Y.
Ohio Motor Car Co., South Cincinnati, O.
Palais de l'Automobile, New York
Rapid Motor Vehicle Co., Pontiac, Mich.
Rauch & Lang Carriage Co., Cleveland, O.
Regal Motor Car Co., Detroit, Mich.
Renault Freres Selling Branch, Inc., New York
Simplex Motor Car Co., Mishawaka, Ind.
Speedwell Motor Car Co., Dayton, O.
Staver Carriage Co., Chicago
Willys-Overland Co., Toledo, O.
York Motor Car Co., York, Pa.

COLISEUM—BASEMENT

Anderson Carriage Co., Detroit, Mich.
Black Mfg. Co., Chicago
Cameron Car Co., Beverly, Mass.
Elkhart Motor Car Co., Elkhart, Ind.
Fal Motor Co., Chicago
Fuller Buggy Co., Jackson, Mich.
Grabowsky Power Wagon Co., Detroit, Mich.
Great Western Auto Co., Peru, Ind.
Inter-State Automobile Co., Muncie, Ind.
Kissel Motor Car Co., Hartford, Wis.
Lion Motor Car Co., Adrian, Mich.
Rider-Lewis Motor Car Co., Anderson, Ind.

Schacht Mfg. Co., Cincinnati, O.
Streator Motor Car Co., Streator, Ill.
Wayne Works, Richmond, Ind.
Zimmerman Mfg. Co., Auburn, Ind.

COLISEUM GALLERY AND ANNEX

Ajax-Grieb Rubber Co., New York
American Electric Novelty & Mfg. Co., New York
Atwater Kent Mfg. Works, Philadelphia, Pa.
Aurora Automatic Machinery Co., Aurora, Ill.
Auto Improvement Co., New York
Auto Parts Mfg. Co., Muncie, Ind.
Bader Brass Mfg. Co., Kenosha, Wis.
Baldwin Chain & Mfg. Co., Worcester, Mass.
Batavia Rubber Co., Batavia, N. Y.
Bowser, S. F., & Co., Fort Wayne, Ind.
Breeze Carburetor Co., Newark, N. J.
Briegs & Stratton, Milwaukee, Wis.
Brown-Lipe Gear Co., Syracuse, N. Y.
Byrne-Kingston & Co., Kokomo, Ind.
Connecticut Telephone & Electric Co., Meriden, Conn.
Continental Caoutchouc Co., New York
Continental Motor Mfg. Co., Muskegon, Mich.
Consolidated Rubber Tire Co., New York
Cook, Adam, Sons, New York
Cook's Standard Tool Co., Kalamazoo, Mich.
Cowles, C., & Co., New Haven, Conn.
Cramp & Sons Co., Philadelphia, Pa.
Dayton Rubber Mfg. Co., Dayton, O.
Diamond Chain & Mfg. Co., Indianapolis, Ind.
Diamond Rubber Co., Akron, O.
Dietz, R. E., Co., New York

NEW YORK, Dec. 20—Preparations for the opening of the American Motor Car Manufacturers' Association show in the Grand Central palace next Friday night are farther along than in any previous year, and it is anticipated that the affair will be the most brilliant of all those promoted by the independents.

All annual meetings and dinners of the big associations that are allied with the motor car industry are scheduled for the week. One of the most important and interesting meetings is that of the Manufacturers' Contest Association, which will be held at the Manhattan hotel, Friday, January 7. This is the first annual meeting of the association since its formation nearly a year ago. President Benjamin Briscoe will preside and make his first annual report telling what the association has accomplished for its members in all manner of contests. It also is likely that at that time next year's campaign will be mapped out.

Another meeting of importance which will be held this year for the first time during the Grand Central palace show is that of the Motor and Accessory Manufacturers. This organization of makers of parts and accessories will hold its annual meeting at 6 p. m. Wednesday at the Waldorf-Astoria hotel, followed by the annual dinner at 7:30 o'clock.

The show committee of the American Motor Car Manufacturers' Association un-

Many Meetings and Dinners Booked for the Palace Show Week

der whose auspices the palace show is conducted, is making even greater efforts than ever to make this year's event a great social success. The show committee has set aside as usual special nights for the formal reception of civic and national dignitaries, clubmen, engineers and society people. While the show does not formally open until 8 o'clock on New Year's eve, there will be a private view at 3 o'clock on the afternoon of December 31. Special invitations have been extended to retiring Mayor George B. McClelland, Mayor-elect William J. Gaynor and other high city officials. President E. H. Gary, of the Automobile Club of America, and president of the executive committee of the steel trust, and his fellow members of the A. C. A. are invited, as will be officials and members of the American Automobile Association, Long Island Automobile Club and others.

The palace show will open to the public each day from 9 a. m. to 10:30 p. m. On Saturday night, January 1, a smoker will be given to the Automobile Club of America, as was the case last year, to all Grand Central palace show exhibitors of motor

cars and accessories. Saturday night has been termed army and navy night by the show committee, and General Leonard A. Wood, commander of the department of the east, together with officers attached to Forts Hamilton, Wadsworth, Schuyler and Governor's Island have been invited to attend, as have members of the Army and Navy Club. On Monday, January 3, the New York Automobile Trade Association will hold its annual meeting at 12 o'clock at the Manhattan hotel. Engineers' night is scheduled for Monday and invitations have been extended to officers of the Engineers' Club and various engineering societies, including the Society of Automobile Engineers.

As at past shows of the A. M. C. M. A., Tuesday has been set aside as society day and the admission will be raised from 50 cents to \$1. This is the day when society turns out en masse and does most of its purchasing of cars. The annual meeting of the Society of Automobile Engineers will be held on Tuesday at 10 a. m., followed by its annual dinner at 8 p. m., both events being held at the Automobile Club of America.

WILL BE HELD UNDER THE AUSPICES OF THE N. A. A. M. THE WEEK OF FEBRUARY 5-12

Dixon, Joseph, Crucible Co., Jersey City, N. J.	Long Mfg. Co., Chicago	Timken-Detroit Axle Co., Detroit, Mich.	Breakstone, S., Chicago
Duff Mfg. Co., Pittsburg, Pa.	Lovell-McConnell Mfg. Co., Newark, N. J.	Timken Roller Bearing Co., Canton, O.	Chicago Wind Shield Co., Chicago
Edmunds & Jones Mfg. Co., Detroit, Mich.	McCord Mfg. Co., Detroit, Mich.	United Manufacturers	Chilton Printing Co., Philadelphia, Pa.
Electric Storage Battery Co., Philadelphia, Pa.	Mezger, C. A., New York	U. S. Light & Heating Co., 30 Church St., New York	Detroit Motor Car Supply Co., Detroit, Mich.
Empire Tire Co., Trenton, N. J.	Michellin Tire Co., Milltown, N. J.	Valentine & Co., New York	Driggs-Seabury Ordnance Corp., Sharon, Pa.
Excelsior Motor & Mfg. Co., Chicago	Morgan & Wright, Detroit, Mich.	Veeder Mfg. Co., Hartford, Conn.	Elite Mfg. Co., Ashland, O.
Federal Rubber Co., Trenton, N. J.	Mosler, A. R., & Co., New York	Vesta Accumulator Co., Chicago	Excelsior Supply Co., Chicago
Firestone Tire & Rubber Co., Akron, O.	Motsinger Device Mfg. Co., Pendleton, Ind.	Warner Gear Co., Muncie, Ind.	Fellwock Auto & Mfg. Co., Evansville, Ind.
Fisk Rubber Co., Chicopee Falls, Mass.	Motz Clincher Tire Co., Akron, O.	Warner Instrument Co., Beloit, Wis.	Flentje, Ernst, Cambridge, Mass.
Fox Metallic Tire Belt Co., 15 Murray St., New York	Muncie Gear Works, Muncie, Ind.	Weed Chain Tire Grip Co., New York	Franklin, H. H., Mfg. Co., Syracuse, N. Y.
Gabriel Horn Mfg. Co., Cleveland, O.	National Carbon Co., Cleveland, O.	Warner Mfg. Co., Toledo, O.	Fulton-Zinke Co., Chicago
G & J Tire Co., Indianapolis, Ind.	National Coll. Co., Lansing, Mich.	Wheeler & Schebler, Indianapolis, Ind.	Garage Equipment Co., Milwaukee, Wis.
Gemmer Mfg. Co., Detroit, Mich.	Never-Miss Spark Plug Co., Lansing, Mich.	Whiteley Steel Co., Muncie, Ind.	Gasoline Motor Efficiency Co., Jersey City, N. J.
Gilbert Mfg. Co., New Haven, Conn.	Norton Co., Worcester, Mass.	Whitney Mfg. Co., Hartford, Conn.	Gates-Osborn Mfg. Co., Marshalltown, Ia.
Globe Machine & Stamping Co., Cleveland, O.	N. Y. & N. J. Lubricants Co., New York	Witherbee Igniter Co., New York	High Frequency Ignition Co., Los Angeles, Cal.
Goodrich, B. F., Co., Akron, O.	Oliver Mfg. Co., Chicago	COLISEUM GALLERY AND ANNEX—SECOND FLOOR	Lavalette & Co., New York
Goodyear Tire & Rubber Co., Akron, O.	Pantasote Co., New York	American Motor Co., Brockton, Mass.	Mesinger, H. & F., Mfg. Co., New York
Gray & Davis, Amesbury, Mass.	Pennsylvania Rubber Co., Jeanette, Pa.	Consolidated Mfg. Co., Toledo, O.	Morrison-Ricker Mfg. Co., Grinnell, Ia.
Ham, C. T., Mfg. Co., Rochester, N. Y.	Randall-Falchney Co., Boston, Mass.	Excelsior Supply Co., Chicago	Motor Parts Co., Plainfield, N. J.
Hancock Mfg. Co., Charlotte, Mich.	Rand Mfg. Co., Detroit, Mich.	Greyhound Motor Works, Buffalo, N. Y.	Motor Specialty Co., Detroit, Mich.
Hardy, R. E., Co., New York	Remy Electric Co., Anderson, Ind.	Harley-Davidson Motor Co., Milwaukee, Wis.	Overland Sales Co., Chicago
Harris, A. W., Oil Co., Providence, R. I.	Republic Rubber Co., Youngstown, O.	Hendee Mfg. Co., Springfield, Mass.	Perfection Spring Co., Cleveland, O.
Hartford Rubber Works Co., Hartford, Conn.	Ross Gear & Tool Co., Lafayette, Ind.	Hornecker Motor Mfg. Co., Geneseo, Ill.	Simms Magneto Co., New York
Hartford Suspension Co., Jersey City, N. J.	Royal Equipment Co., Bridgeport, Conn.	Merkel Light Motor Co., Pottstown, Pa.	Smith, Fred W., Aberdeen, S. D.
Havoline Oil Co., New York	Sager, J. H., Rochester, N. Y.	New Era Gas Engine Co., Dayton, O.	Standard Auto Supply Co., Chicago
Hayes Mfg. Co., Detroit, Mich.	Shaler, C. A., Co., Waupun, Wis.	Pierce Cycle Co., Buffalo, N. Y.	Standard Varnish Works, Chicago
Heinze Electric Co., Lowell, Mass.	Smith, A. O., Co., Milwaukee, Wis.	Reading Standard Co., Reading, Pa.	Triple Action Spring Co., Chicago
Herz & Co., New York	Spicer Universal Joint Mfg. Co., Plainfield, N. J.	Reliance Motor Cycle Co., Owego, N. Y.	Troy Carriage Sunshade Co., Troy, O.
Hoffecker Co., Boston, Mass.	Splittorf, C. F., New York	FIRST REGIMENT ARMORY—GALLERY	20th Century Motor Car Supply Co., South Bend, Ind.
Holley Brothers Co., Detroit, Mich.	Sprague Umbrella Co., Norwalk, O.	Apple Electric Co., Dayton, O.	Universal Tire Protector Co., Angola, Ind.
Imperial Brass Mfg. Co., Chicago	Standard Roller Bearing Co., Philadelphia, Pa.	Benford, E. M., Mount Vernon, N. Y.	Vanguard Mfg. Co., Joliet, Ill.
Jones Speedometer Co., New York	Standard Welding Co., Cleveland, O.		Vehicle Top & Supply Co., St. Louis, Mo.
Kokomo Electric Co., Kokomo, Ind.	Stewart & Clark Mfg. Co., Chicago		
Leather Tire Goods Co., Newton Upper Falls, Mass.	Stromberg Motor Devices Mfg. Co., Chicago		
Link-Belt Co., Philadelphia, Pa.	Swinehart Clincher Tire Co., Akron, O.		
	Thermoid Rubber Co., Trenton, N. J.		

Wednesday, January 5, is the time set for the annual meeting and banquet of the Motor and Accessory Manufacturers. This will be merchants' night and invitations have been sent out to the most prominent merchants of New York. Special attention has been given to those merchants who are now, or are likely to be, buyers of commercial cars. The commercial division this year will act as a special drawing card.

On Thursday, January 6, there will be a meeting of the committee of management of the American Motor Car Manufacturers' Association at 2 o'clock. The Maxwell-Briscoe Motor Co. will give its annual dealers' dinner at the Hotel Manhattan at 7 p. m. Following the dinner the dealers will be entertained by several vaudeville acts. During the evening which is called New York night the affair will be visited by all prominent city officials from Mayor Gaynor down, as well as city, supreme and federal court judges. Friday, January 7, is the closing day during which will be held the annual meeting of the Manufacturers' Contest Association.

MICHIGAN STATISTICS

Grand Rapids, Mich., Dec. 20—Much has been said of the rapid growth of the motor industry, but figures issued by the secretary of state show accurately just how vast this amount has been in Michigan, the state that leads in the production of motor cars in 1909. The figures show that between January 1, 1909, and November 15, 1909, there were thirty-one motor car manufacturing companies organized with a total capital of \$15,043,000. In the same period the number of sales agencies, taxicab services, sight-seeing companies and companies making parts totaled fifty-six with a total capital of \$1,710,000. The grand total then is \$16,753,000. The list of new corporations is as follows:

Concern and Location	Capitalization
Demotocar Co., Detroit.....	\$ 100,000
Ferguson Motor Car Co., Lansing..	25,000
Hudson Motor Car Co., Detroit....	100,000
Marquette Motor Co., Saginaw....	300,000
De Luxe Motor Car Co., Detroit....	150,000
Pioneer Motor Co., Marquette.....	30,000
Regal Motor Car Co., Detroit.....	100,000
Maxwell-Briscoe Motor Co., Detroit	1,500,000
Griswold Motor and Body Co., Detroit, increase from \$5,000 to....	20,000
Imperial Automobile Co., Jackson..	125,000
Fanvien Motor Co., Detroit.....	500,000
Gary Motor Car Co., Muskegon....	200,000
Detroit-Deborn Motor Car Co., Dearborn	50,000
Packard Motor Car Co., Detroit, increase	10,000,000
Krit Motor Car Co., Detroit.....	100,000
Lion Motor Car Co., Adrian.....	350,000
Clarke-Carter Auto Co., Jackson...	100,000
Warren Motor Car Co., Detroit....	100,000
Outing Motor Co., Detroit.....	100,000
Metzger Motor Car Co., Detroit....	500,000
Palge-Detroit Motor Car Co., Detroit, from \$5,000 to.....	100,000
Anhut Motor Car Co., Detroit....	150,000
University Motor Car Co., Detroit..	100,000
Holland Automobile Mfg. Co., Holland	15,000
Ajax Motor Wagon Co., Detroit....	5,000
Duplex Power Co., Charlotte.....	100,000
Welch Co. of Detroit, Detroit....	100,000
Auto Marine Appliance Co., Detroit	3,000
Auto Parts Mfg. Co., Detroit.....	100,000
Warner Mfg. Co., Detroit.....	5,000
Monroe Machinery Co., Monroe....	25,000
Total	\$15,043,000
Companies for manufacturing parts, sales, renting, etc.....	\$ 1,710,000
	\$16,753,000

Rebuilding Big Body Plant

MILWAUKEE, WIS., Dec. 21—The Racine Mfg. Co., of Racine, Wis., builder of motor car bodies, etc., with spirit unbroken by the fire which on December 12 totally destroyed its \$650,000 plant, has started anew and until a new group of buildings can be erected it will continue the manufacture of bodies in other buildings, offered at once by other Racine manufacturers. The production naturally will be curtailed, but fortunately the company had been able before the fire to keep up with its contracts and the motor car companies for which it built bodies are able to continue without delay. The ruins are being cleared away and preparations are under way for rebuilding. The company has many good offers to move elsewhere but will remain in Racine. It carried \$199,000 insurance, and an additional \$100,000 was to have been placed on Monday, the day following the fire. A number of employees at once accepted offers from motor car manufacturers at Detroit, but the majority of the 1,200 mechanics have chosen to remain. All are being employed in some manner. It is said that the company had orders for \$2,000,000 worth of bodies for 1910 on its books at the time of the fire. The officers have already ordered new equipment for its temporary plants, and first shipments arrived late last week.

James W. Gilson, sales manager for the Mitchell Motor Car Co. of Racine, announced immediately after the fire will in no way interfere with the 1910 output. The Mitchell company had enough bodies on hand to tide it over until the Racine Mfg. Co. reaches its regular production in temporary quarters. All deliveries of Mitchell cars will be made according to contract and schedule.

A new million-dollar motor car company has been organized in Wisconsin, under the name of Corliss Motor Co., with factory and headquarters at Corliss, Racine county, Wis. The company will build and market a six-cylinder 50-60-horsepower car. Ernest E. Smythe and A. K. Stebbins, of the big Milwaukee legal firm of Bloodgood, Kemper & Bloodgood, and J. A. Wallis appear as incorporators in the articles filed late last week. It is reported on reliable authority that the company is backed by the owners of the Wisconsin Engine Co., of Corliss, who are eastern steel and rolling mill men. Racine capital has been interested also.

The nature of the backing recalls the sale some weeks ago of the Owen Thomas Motor Car Co., of Janesville, Wis., maker of the O-T. Six, to a syndicate controlling the Wisconsin Engine Co. There is every indication that the Corliss Motor Co. is organized to succeed the Thomas concern, although this is not confirmed.

The Corliss Motor Co. has purchased 10 acres adjoining the holdings of the Wisconsin Engine Co. and plans have been prepared for several large buildings, work on

which will begin in 30 days. The Corliss Motor Co.'s product, not yet given a name, will be the first all-steel motor car in America. The engine is designed by Mr. Elliott, formerly of the Northwestern railway. Every part, including body and frame, will be of steel, and all parts will be made under one roof. The weight of the car is 1,000 pounds less than that of any six-cylinder now on the market, it is claimed.

The success of the many factories and foundry companies which devote all their attention to the production of castings and parts for motor car builders has led to the organization of two foundry companies at Racine for this purpose. They are the Racine Foundry Co., capital \$40,000, and the Progressive Foundry Co., capital \$10,000. The Racine Foundry Co. is organized by R. R. Birdsall, Henry Graham and W. C. Palmer. A plant will be erected at once on Tenth street and Milwaukee road tracks. Racine is now the seat of several big companies, notably the Mitchell Motor Car Co., Pierce Motor Co., Piggins Brothers, Racine Mfg. Co., building either complete cars or important parts.

It is reported that the Racine-Sattley Co., with main factory and offices at Racine, Wis., manufacturer of carriages, wagons, etc., will soon engage in the manufacture of motor cars. Color is lent to the report by the announcement that David Connolly, of Pontiac, Mich., an expert motor car designer, has been engaged by the Racine-Sattley Co. George H. Yule, of the Yule family which owns the Badger Brass Mfg. Co., of Kenosha, Wis., recently became president and general manager of the Racine concern, succeeding Herbert E. Miles, the tariff expert, who has retired from active participation in the business.

RECENT QUAKER DECISIONS

Philadelphia, Pa., Dec. 20—At last there's a rift in the clouds! Judge Ormerod, of Potter county, has called the attention of the grand jury of that county to that relic of the barbarous era of road-building—the thank-ye-ma'am—characterizing them as "nuisances that must be abated." Judge Ormerod recently became a motorist, and the neck-wrenching qualities of these anachronisms have been brought forcibly to the judicial mind.

Police Sergeant F. Marion Cressman, of Reading, Pa., charged with having caused the death of a young girl by driving over her in a motor car of which he had lost control, was adjudged not guilty by the jury last week. The car had been loaned to Cressman by a friend, and the case hinged upon the fact that he, Cressman, did not have a license. The car, however, was licensed by the owner, and the court affirmed the contention of the defense that until the end of the present year the car and not the operator is licensed, unless the driver be a paid chauffeur.

Legal Coup By Studebakers

DETROIT, MICH., Dec. 21—The effort of the Studebaker Automobile Co. to persuade the United States courts to enjoin the E-M-F company from annulling the contract which has existed up to date, governing the sales of E-M-F motor cars, has formed by all odds the most engrossing litigation in the local history of the industry.

Following the application of the Studebaker company for a restraining order and a permanent injunction against the E-M-F in the United States district court in Detroit more than a week ago, in which no decisive result was attained, the South Bend firm stole a march on the local manufacturers by sending its attorneys to Cincinnati where application for a similar writ was made before Judge Severens of the United States circuit court. In the second case the application was made on behalf of Messrs. Fish, Studebaker and Eames, as minority stockholders in the E-M-F company. Judge Severens issued a temporary injunction and set Wednesday, December 22, as the date for the hearing and Kalamazoo, Mich., as the place. The injunction merely prohibited the E-M-F company from selling cars to any party other than the Studebaker Automobile Co. The injunction was secured on Thursday, December 16, but service was not obtained on the officers of the E-M-F company until Friday and all news of the application was withheld until Friday evening.

In the application, Attorneys John S. Miller, of Chicago, and Henry M. Duffield, of Detroit, representatives of the Studebakers, alleged that the action of President Walter S. Flanders of the E-M-F company in cancelling the contract by which all cars manufactured by the E-M-F were to be marketed through the Studebakers, was taken without the ratification of the board of directors.

The confusion incident to the duplicate applications for permanent orders was emphasized on Monday when Judge Swan, before whom the first application was made, postponed for a week the hearing set for that date, thus tacitly ruling that the battle be fought out in the Kalamazoo courtroom. The postponement was made in spite of the protests of the attorneys for the E-M-F company, who professed their desire to go ahead immediately with the trial of the suit. The E-M-F company nevertheless filed its answer to the claims of the Studebakers. This document set forth that the annulment of the contract had been made with the full consent of the majority of the board of directors, and after a meeting in which a vote to that effect had been taken. It was further set forth that the Studebakers stood to lose merely their prospective profits, in case the annulment held good, while the E-M-F, in the event of the granting of a permanent injunction, would sustain tremendous

damage through the failure of the Studebakers to fulfill their part of the transaction in accepting all the cars made—a failure which, the E-M-F claimed, had not been confined to the month of December but had also been the case in October and November. It was also stated that the E-M-F company was the party which had built up the reputation of the product and had spent the greater share of the sum which had gone for exploitation.

The E-M-F company claimed it had been already put to great expense for the storing of the cars which the Studebaker company had failed to purchase and, if enjoined from disposing of them to dealers who were ready and anxious to purchase them, would be forced to either shut down the factory or else make a retrenchment in the scale of manufacture which had been determined on with the full consent of the Studebakers and the expenditure of large funds for additions and enlargements.

The claim was made that the Studebaker company had greatly injured the sales of the E-M-F cars by insisting on agreements with retailers which bound the distributors to take a certain number of Studebaker cars at low and unfavorable discounts.

A statement was appended showing that the E-M-F has an investment of \$2,582,681 in the six plants now being operated in Detroit, Pontiac and Port Huron, and that it has contracts for material with sixty firms, aggregating \$5,000,000. The contracts being based on a definite agreement providing for the payment of the cost price, plus a certain percentage of profit, it is pointed out that all these firms would be seriously damaged by any falling off in the sales of the E-M-F cars.

Though not formally announced, it is understood that the answer of the E-M-F company filed at Kalamazoo represented substantially the same situation.

In the meantime, following the granting of the temporary injunction the Studebaker company caused the insertion in the local daily papers of huge advertisements, flatly stating that E-M-F and Studebaker-Flanders cars would be marketed as formerly by the Studebaker Automobile Co. exclusively. The E-M-F company abandoned for the time the publicity field and devoted itself to the organization of a selling force. A scheme was laid out, dividing the country up into districts and managers for the various districts were tentatively appointed. Scores of dealers, brought to Detroit by the possibility of securing the agency for the E-M-F cars, visited the factory and plans were made for the allotment of the different territory. The factory continued running full force, turning out sixty cars a day, while the Studebaker-Flanders plant was similarly as active. The cars are being stored

as rapidly as completed and matters otherwise have progressed in a way which will enable the E-M-F to take advantage of a favorable ruling of the court, immediately, in case such a decision is handed down.

KNIGHT HOME ON VISIT

Chicago, Dec. 22—Charles Y. Knight, designer of the Silent Knight valveless motor which has been the sensation of motoring circles in Europe for the past 2 years, returned last week for a short visit to his home here after an absence of 2 years, during which time he successfully launched his motor in five of the leading European countries. In that time he closed up with the Daimler company for England, Ireland, Scotland and Wales, the Panhard company for France, the Mercedes for Germany, the Minerva for Belgium, and the Daimler company of Italy for Italy.

Mr. Knight, having completed his task of establishing the status of his motor before Europe, is spending a week or so laying plans for its introduction in America, and soon after the new year will return to his present temporary home in Coventry, England, to superintend some business matters. In speaking of the motor situation in England he said: "All told not more than 20,000 cars will be built in England this year, of which 1,700 will be Daimlers with the Knight motor. The English industry is in a sound condition at the present time. It has passed through its hard times and is now in good condition."

"The Englishman is a close car buyer. He will not buy until he knows what a car is going to cost to operate, in fact he wants a guarantee as to the annual maintenance, annual fuel cost, and probable life of the car. This is characteristic of all the buyers. The majority of them have a definite income which must last them for the year, and they never will go beyond it, so that the car they buy is largely determined by its cost of upkeep. This has had a salutary effect on the English maker who has had to build with reliability, lightness, economy and endurance in view. In selling English cars it has not been a case of the lightest car, the fastest car, or the cheapest car; rather the car which costs least to buy and maintain."

TIRE-MAKERS STRIKE

Hartford, Conn., Dec. 21—As a result of wage-cut of from 15 to 33½ per cent about 300 tire-builders at the Hartford Rubber Works Co. went on a strike here this morning, organized a parade and demonstration in the streets in the vicinity and then held a prolonged meeting in a hall in the factory district. The factory has been running 24 hours a day for some time so that there are two shifts of workmen. The local tire makers are paid by the day, earning from \$1.75 to \$3 per day, and the cut which ranges from 15 to 33½ per cent averages 24 per cent for the whole body.

FRENCH SMALL CARS RUNNING IN LONG TEST



SCENES ALONG THE PICTURESQUE ROUTE OF THE FRENCH VOITURETTE TESTS

PARIS, Dec. 9—France is holding a reliability trial. It has adopted both the idea and the word from across the English channel and explains that the foreign word means "that in which you can have confidence." Thus, as confidence needs to be established more in the smaller types of cars than in their big brethren, the trial has been limited to voiturettes, with dimensions fixed at 4.9 by 5.9 for a single-cylinder engine, 3.9 by 4.1 for a twin, and 3.1 by 4.7 for a four-cylinder motor.

The reliability trial is simplicity itself; fifteen daily stages, totalling 2,000 miles, to be covered at an average speed of not less than 15½ miles an hour, with no other stoppages than filling gasoline, oil and water tanks and changing tires when necessary. As each day's run is finished the car is pushed into a closed garage and locked up until the official starting hour in the morning. Six courses have been selected, but the particular one to be followed is never made known until a few minutes before the start. To come through with a clean score practically amounts to a sealed bonnet competition, but in order not to decimate the ranks too much it is allowable to clean spark plugs, carbureter in case of obstruction, tighten nuts and adjust brakes and driving chains without penalization. Any other work on the car entails the loss of points.

Thirty-three Cars Start

Thirty-three small cars entered for the trials, but on the Sunday morning appointed for the start the number had been reduced to twenty-nine actual competitors, the firms represented being Sizaire-Naudin, Gregoire, Delage, Aleyon, Hurtu, Corre-la-Licorne, Barre, Demeester, Doriot-Flandrin-Parant, Turicum, Fouillaron, Rolland-Pillain and Zenith. This list comprizes all the French voiturette constructors of any importance with the exception of Peugeot.

Although the one-lunger has been most highly developed in France for small-car work, it is somewhat surprising to find

that they are in a decided minority in this competition. There are only six single-cylinder cars, compared with twenty-three fours and no twins. The only firm putting in a full team of single-cylinder cars is Sizaire-Naudin; even they are about to start the construction of a four. Doriot-Flandrin-Parant has one single and two fours, and the others in the one-lunger class are Hurtu and Fouillaron. It would not be safe to conclude from this that the one-lungers are going out of use, but rather that the manufacturers have more confidence in their fours, or prefer to push them in preference to the singles.

Deceiving in Appearance

From an external examination only it would be impossible for the most expert motorist to distinguish the ones from the fours. Ninety-nine men out of a hundred would swear, indeed, that the single-cylinder Sizaire-Naudins had a multiple-cylinder motor under their bonnets, while the Doriot-Parant single is an exact counterpart externally of its four-cylinder brethren. If anything the singles are quieter than the fours, for the former are well muffled, while the latter have that peculiar ring of a small high-speed four-cylinder motor with its exhaust not completely muffled.

Although 15½ miles an hour is all that is required of the cars, no driver is satisfied with such a crawl. On the first 2 days the average speed of the conservative drivers was 25 miles an hour, while some of the daredevils went very much higher. There was not a single case of failure to make the controls on time, though several failed by reason of minor adjustments which were not allowed under the rules. Although the roads are particularly heavy by reason of persistent storms, it is certain that several will come through with a clean score and elimination is likely to be caused more by reason of small adjustments than for serious mechanical defects.

One of the most important conditions is

that the cars shall be completely fitted with hood, windshield, running boards, lamps, etc., as for winter touring. In the majority of cases this regulation has been strictly adhered to. A four-cylinder Corre-la-Licorne, indeed, with an engine only measuring 3.1 by 4.3 inches bore and stroke, has a closed four-passenger inside steering body, of a nature that is not usually classed with voiturettes. In several cases the letter of the law rather than its spirit has been adhered to, the windshields being mere apologies for this article. Most, however, are fairly well fitted, though passenger's comfort has not been so well considered on the open touring car as by the English neighbor. The sides of the bodies are too low, side doors are not used, and there is generally a lack of protection against wind, rain and mud.

Mechanically there is not a great deal of variety in the competing vehicles. Large-car lines are followed in the majority of cases for both external and internal features. The four-cylinder motors are for the most part in a single casting, the bore varying from 2½ inches to the maximum of 3.1 inches. A long stroke is generally favored. High-tension magneto without batteries as a stand-by is to be found on every car in the competition. There are two cases of friction transmission, in one of which the final drive is by single chain and in the other by cardan shaft. In price the voiturettes vary from \$850 to \$1,200 complete.

Details of Competition

On the first day, December 5, three cars were penalized. A Barre met with a peculiar mishap. Almost within 5 miles of the finishing point a fan belt came off, necessitating a stop. A Doriot-Flandrin-Parant lost its clean score on account of a leaky radiator. Another car of the same make was penalized because the driver stopped to tighten an inlet pipe nut. The manufacturers of the Doriot-Flandrin-Parant lodged a protest with the jury

against the penalization of their second car, claiming that the case did not come within the rules of the trials. At this time the jury has not yet decided the case.

On the second day a Turicum was penalized because the driver tightened a friction plate nut. The penalization was protested by the manufacturers and on the following day the jury decided in their favor, thus leaving the car on the clean-score list. The second car to lose its clean score on the second day was the Fouillaron. The driver was slow in replenishing and on the return trip, when about 20 miles from the night control, was compelled to wait from 10 to 15 minutes at a railroad crossing. When he reached the control he was 5 minutes behind scheduled time, which caused the penalty. The manufacturers of the Fouillaron protested against the penalty, but the jury confirmed it as it came within the rules. The third car to be penalized was a Sizaire-Naudin on account of a broken spring.

On the third day no car was penalized, but on the fourth day the Zenith, owing to serious mechanical troubles, was withdrawn from the trials. One of the clean-score Barre cars collided with the Barre which was penalized on the first day. The radiator of the former car was damaged, but the car continued the trip to Beauvais, which was the turning point. There a stop had to be made for repairs to the damaged vehicle.

MORE MONEY FOR ROADS

Columbus, O., Dec. 20—A total of \$880,000 or \$10,000 for each county in Ohio will be asked from the next session of the Ohio general assembly by State Highway Commission J. C. Wonders. His estimates for the needs of the department were filed with the auditor of state last week. He also wants more money for additional engineers in order that the work of the department can be carried out in better shape. For the past 2 years each county has been getting but \$5,000 a year for good roads.

CARS IN THE FRENCH VOITURETTE RELIABILITY TRIALS

Car	Seats	Body	No. Cyl.	Bore	Stroke	Ignition	Tires	Size of Tires
Sizaire-Naudin.....	2	Dble. Phaeton	1	4.75	5.5	Bosch	Cont'n'al	30 x 3 3/4
Sizaire-Naudin.....	2	Spider	1	4.75	5.5	Bosch	Cont'n'al	30 x 3 3/4
Sizaire-Naudin.....	2	Spider	1	4.75	4.75	Nilmelior.	Cont'n'al	28 x 3 3/4
Gregoire.....	2	.....	4	3.14	4.33	Nilmelior.	Michelin	32 x 3 3/4
Gregoire.....	2	Dble. Phaeton	4	3.14	4.33	Nilmelior.	Michelin	33 x 4 1/2
Gregoire.....	2	.....	4	3.14	4.33	Nilmelior.	Michelin	32 x 3 3/4
Delage.....	2	.....	4	2.95	4.75	Nilmelior.	Michelin	30 x 3 3/4
Hurtu.....	2	.....	1	3.93	4.75	Nilmelior.	Michelin	28 x 3 3/4
Hurtu.....	6	Semi-Limous..	4	3.14	4.75	Nilmelior.	Michelin	30 x 3 3/4
Fouillaron.....	2	.....	1	3.93	5.11	Nilmelior.	Michelin	30 x 3 3/4
Barre.....	2	Dble. Limous..	4	2.95	4.75	Nilmeloir.	Hutch'sn	32 x 4 1/2
Barre.....	2	Divy. Car Body	4	2.95	4.75	Nilmeloir.	Hutch'sn	32 x 4 1/2
Barre.....	2	.....	4	2.95	4.75	Nilmelior.	Hutch'sn	32 x 4 1/2
Dariot, Flandrin, Parent..	2	.....	1	3.93	5.11	Bosch	Cont'n'al	28 x 3 3/4
Dariot, Flandrin, Parent..	4	.....	4	2.55	4.75	Bosch	Cont'n'al	28 x 3 3/4
Dariot, Flandrin, Parent..	3	.....	4	2.75	4.75	Bosch	Cont'n'al	30 x 3 3/4
Corre-LaLicorne.....	2	Dble. Phaeton.	4	2.60	4.33	Bosch	Michelin	30 x 3 3/4
Corre-LaLicorne.....	2	Dble. Phaeton.	4	2.75	4.75	Bosch	Michelin	30 x 3 3/4
Corre-LaLicorne.....	2	.....	4	3.14	4.33	Bosch	Michelin	32 x 3 3/4
Turicum.....	2	.....	4	2.95	4.33	Untenberg	Cont'n'al	30 x 3 3/4
Turicum.....	2	.....	4	2.95	4.33	Untenberg	Cont'n'al	30 x 3 3/4
Alcyon.....	2	.....	4	2.95	4.33	Bosch	Russ.Am	30 x 3 3/4
Alcyon.....	3	.....	4	2.95	4.33	Bosch	Bergoug	30 x 3 3/4
Alcyon.....	2	Dble. Phaeton.	4	2.95	4.33	Bosch	Dunlop	30 x 3 3/4
Zenith.....	2	Dble. Phaeton.	4	3.14	4.33	Bosch	Michelin	32 x 3 3/4
Rolland-Pilain.....	2	.....	4	3.14	4.33	Bosch	Cont'n'al	30 x 3 3/4
Rolland-Pilain.....	2	.....	4	3.14	4.33	Bosch	Cont'n'al	30 x 3 3/4
Rolland-Pilain.....	2	.....	4	3.14	4.33	Bosch	Cont'n'al	28 x 3 3/4
Demeester.....	2	.....	4	2.95	4.33	Bosch	Edelme	30 x 3 3/4

The Turicum carries its own make of spare wheel; others are Stepneys. All cars are shaft-drive with the exception of the Turicum, which is friction and chain

Awards In French Industrial Trials

PARIS, Dec. 11—Intimation has been given by the minister of war that nine different types of motor cars proved satisfactory in the recent commercial and military trials held by the Automobile Club of France, and have met with the approval of the military jury. As soon as the necessary funds have been voted by parliament, and this will be done within a few weeks, these nine types can be offered to private users with the advantage of a subsidy on condition that their owners guarantee to present them for annual inspection and to place them in the hands of the army in case of mobilization. The subsidies amount to \$600 per vehicle for the first year and \$200 for each of the 3 succeeding years. All that the army requires is that the subsidized vehicles shall

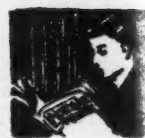
be similar in every respect to those presented in competition. This will give France a fleet of commercial cars ready for army purposes at a moment's call, and always kept in the best of condition, the annual inspection and the fact that they are employed for ordinary commercial purposes assuring this. The vehicles selected are two four-cylinder Aries trucks carrying 3-ton loads; two four-cylinder Aries carrying 4-ton loads; a 15-horsepower 3-ton two-cylinder Delahaye; two four-cylinder Delahaye trucks, each taking 4-ton loads; two Berliets, two two-cylinder Co-handets, two de Dions, two Saurers and two Vinot-Deguingands. It will be remembered that these industrial trials were run under military supervision and that the rules were of a most exacting nature.



FRENCH RELIABILITY TRIALS—SMALL CARS, SHOWING THEIR WORTH IN STRENUOUS TEST



The Readers' Clearing House



WANTS NORTHERN PARTS

ROCHESTER, MINN.—Editor Motor Age—Through the Readers' Clearing House will Motor Age inform me where I can secure parts and extras for a Northern model L roadster? The Northern company, I understand, was absorbed by another firm. Will Motor Age also inform me what can be used as a base on sheet metal so that paint will adhere firmly?—F. Young.

The Northern company was absorbed by the E-M-F company. You can undoubtedly secure parts by communicating with the E-M-F Motor Car Co., Detroit, Mich.

NOT IN RIVERHEAD RACE

Bardstown, Ky.—Editor Motor Age—Through the Readers' Clearing House will Motor Age tell me what time the Pope-Hartford made in the Riverhead race, what was the distance and who was the driver? What became of the Hudson car in the Munsey tour? Does Motor Age think the Glidden tour will go south in 1910. What are the prospects for a big entry list next year and when will the route be announced?—Claude W. Wilson.

The Pope-Hartford did not compete in the Riverhead road race. The Hudson car did not compete in the Munsey run. The only announcement regarding the Glidden next year is that in all probability it will not take place. There will, however, be some national reliability contest of some nature.

POWER FROM LONG STROKE

Detroit, Mich.—Editor Motor Age—I note the space Motor Age gave my first communication in November 25 issue, but I think the average car owner would be interested in knowing how much stronger pulling machine one would get by buying an engine with a longer stroke. Really, what I am trying to get at is this: The last year's Mitchell 30 engine was $4\frac{1}{4}$ by $4\frac{1}{2}$ inches, actual rating 28.9 horsepower; the 1910 cars is the same size cylinder and half an inch longer stroke, and still it only figures the same rating, but I am positive, of course, that the longer stroke gives the engine a great deal more pulling power, but possibly not as much speed, and I am anxious to find out how much more power will I have next year with a 5-inch stroke than I had this year with only $4\frac{1}{2}$ -inch stroke. I understand that engine horsepower is rated entirely upon the square inches and number of cylinders, but the length of stroke is not taken into consideration. I know that the only real test of the car is to put it on a dynamo or dynamometer, but this, of course, we cannot do, but taking into consideration the number of cylinders, the size of same, together with the

length of stroke, it should give us what?—E. P. Andrew.

It is impossible to give the increased pulling power of the longer stroke except on the dynamometer or some specially designed tester. As before stated, there are so many mechanical changes in the 1910 motor that comparisons in this regard would not prove anything.

STARTING SIX ON SPARK

Chicago—Editor Motor Age—I read with much interest the article on "Making a Motor Start on Compression" by M. R. Wells in Motor Age, issue December 10. If it is possible I would like to hear from Mr. Wells on the six-cylinder proposition. I have two standard high-priced American cars—one a four-cylinder and the other a six. I can start the four-cylinder on compression at any time within 1 minute to 1 hour after the motor has been stopped and in isolated cases have even started it several hours after the motor had been stopped, but I cannot start the six-cylinder motor on compression after it has been stopped 2 minutes or more. Could Mr. Wells explain this? I think your other readers would be glad to get this information.—E. S. V.

ECONOMY CAR SUGGESTIONS

Sioux City, Ia.—Editor Motor Age—I wish to make a suggestion, or rather ask a favor, of important interest to readers of Motor Age. I note that in all articles dealing with questions of economy, efficiency, durability, etc., wherein comparisons are made in illustration, Motor Age invariably quotes only the name of the cars in competition. It is safe to say that not 5 per cent of the readers are acquainted with the design or systems employed in the cars in the contest. This robs the article of its greatest news interest for the very enlightenment desired by the readers of these pages is denied them. As a respectful suggestion, if when enumerating the contesting cars Motor Age could briefly designate the systems used by each car, it would mean much more to the reader. For instance: In Motor Age, December 16 issue, the statement is made that the Saurer used 37.7 pints of oil to 1,794.5 miles, while the Cohendet used 602.18 for the same distance, and while leakage no doubt entered largely into this discrepancy it is obvious the Saurer had a better system. Now, as I look at it, not one in 10,000 care what the Saurer did, but 10,000 out of 10,000 do

want to know the oiling system used in the car that showed such economy. I believe such important additional news on the part of Motor Age—showing why and how the winning car took first award in this or any other contest—together with the oil and fuel economy, efficiency, etc., not only would add great interest to your very interesting high-grade periodical but would be of great educational value as well, not only to owners and dealers but to the manufacturers.—C. A. Kneeder.

Your suggestion is a good one but it is quite impossible to get in early reports the oiling system used on winning vehicles. Motor Age expects later to go into detail on the oiling system of such vehicles where it is possible, but cannot do such until some time after the announcement of the result.

INTAKE VALVE OPENING

Boston—Editor Motor Age—in conventional practice, what is the earliest and what is the latest point one finds for the opening of the admission valve of a four-cycle gasoline motor? I presume that this point is most early in the highest speed motors. Is this always the case? What limits the position at which admission occurs? Also, can Motor Age give me any information as to the effect on the speed and torque characteristics of such a motor when the point of closing of the admission valve is varied? At what time does the exhaust occur and cease, and what is the effect of varying these events in the same way as above?—N. S. Seeley.

Of twenty motors examined the majority show the intake valve opening after the top dead center, or when the piston is descending on the suction stroke. Some concerns open the intake on the dead center, but with the majority it is from 16 to 25 degrees after. The tendency is growing at present to have the intake and exhaust valve open simultaneously at the end of the exhaust stroke, and at the start of the suction stroke. The early opening of the intake valve is not a characteristic of high-speed motors because in these it is as important to have a good exhaust; one high-speed motor opens the intake 24.5 degrees after dead center. Regarding the effect on speed and torque of the proper opening of the intake valve Motor Age has not definite laboratory data on such. The exhaust valve generally opens from 30 to 40 degrees and often 45 degrees before dead center. In one of the best known makes of American cars the exhaust valve opens 48 degrees before dead center. Makers are all agreed that it is advisable to open it early. One maker goes so far as to set the high-water mark of 53.5 degrees before dead center.





Manufacturers' Communications



"ELECTRIC-CAR ENTERPRISE"

BUFFALO, N. Y.—Editor of Motor Age—I am gratified to read the editorial entitled "Electric-Car Enterprise" in Motor Age of the 16th inst. Ever since the electric car outgrew its swaddling clothes and demonstrated its right to serious consideration as a vehicle of practical utility for everyday city and suburban uses, I have advocated following the trend of gasoline car exploitation as a means of centering interest in the possibilities of this type of vehicle. Such public demonstrations and competitive tests to be made by stock cars of standard equipment only, so that the public may not be misled as to the true value of the stock electric for practical needs. I first gave tangible expression to my point of view in this matter some 7 years ago, when I built an electric carrying six passengers and ran it from Boston to New York City. It will be 4 years next spring since I made a test run from New York city to Philadelphia on one charge of the battery.

Realizing that competitive tests were the only events which would satisfactorily engage public attention, however, and the respective racing committees finding it difficult to secure other entrants in most of the contests scheduled for electrics, I issued a challenge in June of last year for any kind of a stock-car contest, anywhere and at any time. This was not accepted, not even replied to, so that the only alternative left was to give exhibition demonstrations. This was done in Minneapolis, St. Louis, Milwaukee, Grand Rapids, and other cities.

A Babcock was entered in the Fort George-New York city hill climbs of 1907, 1908 and 1909, but no other electric competed. At the Giant's Despair contest last May the committee in charge reported that it could get no other electric to enter. At the Porter hill-climb, Cleveland, last June, Mr. Forbes, secretary of the Cleveland Automobile Club, frankly confessed his inability to get any other electric to compete and returned our entry fee; this, notwithstanding there are three well-known electrics made in that city. At the Algonquin hill-climb, Chicago, last August, the electric that held the record on this hill could not be persuaded to defend it, and another car of national reputation scratched just before the race and without assigning any reason, as is evidenced by the report of this event in Motor Age of August 12, last.

Thinking some other form of contest might be more favorably received, in October of last year I petitioned David Beecroft, editor of Motor Age and then chairman of the technical committee of the Chicago Motor Club, for an electric event of several days' duration, open to all manufacturers of this type of vehicle, and con-

templating such economy tests as runs from Chicago to Elgin and return, to Joliet and return, to Milwaukee and return, mileage runs around Chicago city, hill-climbs and speed demonstrations. It was proposed that each car should carry an observer and that all cars should be cared for in the same garage, so there could be no question about the honesty of the tests. As only one or two electric representatives manifested any interest whatever, the proposition was indefinitely postponed. Failing in this I gave an exhibition run of 1,244 miles through Illinois and demonstrated the capabilities of the electric in the various cities en route.

As Motor Age very truthfully observes in its editorial referred to, these ex-parte demonstrations are not productive of the widespread interest which naturally attaches itself to competitive contests. There are many other instances corroborative of the lack of co-operation and even enthusiasm on the part of electric manufacturers in promoting suitable events which would surely popularize and stimulate the interest of the car-buying public in our product.

In view of the several excellent electrics now made in this country, the manufacturers owe it to themselves to encourage such competitive contests as will bring the possibilities of this type of car to the favorable attention of the thousands who are able to own them, and eradicate the deep-rooted belief that an electric gets that tired feeling after 25 to 30 miles, or that it will balk at any hill a gas car can climb. In its sphere it is the ideal car, and that it is on the threshold of a widespread popularity and demand is surely the handwriting on the wall. I believe that the electric campaign in which Motor Age has just fired such a decisive gun will take definite form during the coming year.—F. A. Babcock, President Babcock Electric Carriage Co.

KANSAS CITY SHOW SITUATION

Kansas City, Mo., Editor Motor Age—Noticing reports from Kansas City from time to time, there seems to be an inclination to prejudice the facts as per an article intimating that the Kansas City show of February 28 has "an advantage of a greater variety of cars and the old association having fifty members," etc. Then, again, another article refers to the Motor Car Trade Association as seceders, etc., consequently I would like to give a true, unbiased report of the Kansas City

conditions. As president of the old Kansas City Automobile Dealers' Association, I called a meeting with the object of electing a show committee, in the usual way. Sixteen of the comparatively new dealers in Kansas City held a caucus and called a meeting on the day before the regular meeting and agreed to support a certain ticket of five, comprised of all new members, as far as the show was concerned; ignoring the older dealers and the previous show committee which had made such a good showing here in the past. To accommodate all it would be necessary to expend from \$7,000 to \$8,000 more than heretofore had been required. Therefore the old dealers, who handle 85 per cent of the output of cars in this vicinity and who have permanent places of business, were placed on the defense and were compelled to organize a new association called the Motor Car Trade Association of Kansas City, and the writer was chosen as president; consequently compelled to resign from the old organization. This caucus was ill-advised and a primary cause of the disruption of the old organization. I regret exceedingly that this condition prevails, and hope that Kansas City will have a national show in another year, as it seems to me the only way to bring harmony out of chaos.—H. E. Rooklidge.

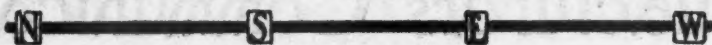
THE FOREIGN OUTLOOK

New York—Editor Motor Age—There seems to be a general opinion in this country that the motor car manufacturers of Europe are suffering a business depression, and I want to correct this. In my recent travels on the continent I found all the factories I visited rushed with orders and working to their full capacity. The Olympia show which I visited also gave evidence of a most active demand for cars. Larger and higher-powered cars are being ordered by the most discriminating buyers and shaft-drive is universally popular. The tendency in the new models is toward a smaller bore and larger stroke motor with slower speed and high compression. Conditions at the Benz works at Mannheim, Germany, are the best in the history of the 25 years of this company's business experience. The new 60-horsepower shaft-driven car particularly has captured the popular fancy. I investigated very thoroughly the work of the motor truck now being used by the German army which has been selected after the most exhaustive tests and which has been developed under government patronage, thousands of dollars having been contributed to German factories for experimental purposes. I was so impressed by the excellence of the Gaggenau truck that I have secured the American rights for this commercial vehicle.—Jesse Froelich, Benz Import Co.





From the Four Winds



Cup for Van Sicklen—N. H. Van Sicklen, of the Automobile Blue Book, has received the perfect-score cup awarded him for his clean record in class 1 of the New York-Atlanta tour.

Good Ohio Road Map—State Highway Commissioner J. C. Wonders, of Ohio, has had prepared plats for a complete road map of the state which will be published by counties. Every turn, bridge, railroad crossing and rough place will be indicated in the maps. The maps will be published in book form.

Plan Pike's Peak Road—The city council of Colorado Springs, Colo., has been petitioned to take steps in conjunction with the forestry service to construct a road up Pike's peak. The old carriage road can be repaired for about \$8,000, it is said, and considerable revenue to the city would result. The government is known to favor carriage and other roads through its reserves, since the easy access lessens danger from fire.

Wants Universal Lights—John P. Coghlin, president of the Worcester Automobile Club, of Worcester, Mass., is working on the fight of the association to renew its legislative attack to have all vehicles throughout the state carry lights. The fight was waged unsuccessfully last year, but the motorists believe they have a champion in A. E. Speare, president of the state association, who was elected a member of the house of representatives from Malden.

Joy-Rider Fined—The first case where a chauffeur received a severe sentence for joy riding with his employer's car was decided before Judge Osborne, of the police court of Columbus, O., recently when C. G. Noland received a fine of \$25 and costs and being unable to pay the fine was sent to the workhouse to work out the fine. Noland took the car of Dr. L. M. Early, head of the L. M. Early Automobile Co., for a ride the other evening and was not arrested before 3 o'clock in the morning. His excuse was that he was testing the carbureter.

Old Bridge Is Fixed—Motorists touring through New York state will be pleased to learn of the improvements to the old free bridge over the Seneca river just west of the city of Auburn. This bridge, which is on the direct route from Albany to Buffalo, has been condemned by the state engineer for years and within the last 2 years has been regarded as particularly unsafe for heavy cars. Through the liberality and enterprise of the Auburn and Syracuse clubs, together with a number of philanthropic individuals, the bridge now is in good repair. It is the intention of the state to proceed next year and complete



NEW YORK-ATLANTA TOUR CUP

the building of state roads between Albany and Buffalo, which work was temporarily held up pending the repairing of the bridge.

Worcester Run Postponed—The Worcester Automobile Club of Worcester, Mass., was unable to hold its endurance run last Friday because the manufacturers and dealers were short of cars and extremely busy preparing for next year's business.

Columbus Show Prospects—Thirty-nine makes of cars will be exhibited at the motor show at Columbus, O., which will be held December 25 to January 1 in the Columbus Auditorium under the auspices of the Columbus Automobile Club. All available space has been sold and practically all details have been arranged for the event which will be one of the most important shown in the middle states. The committee of arrangements consists of Perin B. Monypeny, chairman; Norman O. Aeby, Herman Hoster, Dennis Kelly and Harry Sims.

Work For Knipper—Billy Knipper will pass most of the winter in Mexico laying out routes around the City of Mexico and getting records for these routes. Knipper will take with him a Chalmers 40 and also a Chalmers 30. For some time Mohler & de Gresl have been in correspondence with Knipper, who will spend January and February in Mexico and return to take up racing as a member of the Chalmers team in the spring. On the Mexican trip he will lay out routes from Mexico City to Pachuca, Pueblo, Vera Cruz, and many other points, first making each trip care-

fully to learn the way and then at speed to set a record mark. Many of the routes are over the mountains and include much rough going.

Louisville Club Growing—The Louisville Automobile Club's organ, Toots, quotes a recent interview with President Strause in which he says: "The most active work of the club within the past 30 days has been along the line of the membership campaign, there having come into this body considerably over 100 new members. Our membership has now passed the 350-mark, and with a continuance of the good work, we will soon have attained the promised 400."

Utilizing Old Cars—Many a second-hand car of the vintage of a few years back is now doing duty on the farm of some thriving tiller of the soil. One rather novel and effective use made of an old two-cylinder Knox is as a portable saw-mill. A large pulley is bolted to the engine shaft and through a belt operates a good-sized circular saw carried on a bearing on the forward part of the car, on which is also built a wood-sawing rack. The old car makes a wood pile look like an easy task quickly accomplished. Another farmer recently acquired an old car of the same type and gets to the city every day with produce in half the time he formerly used to.

Can Fix Speed Zone—In an opinion rendered recently by Attorney General Denman, of Ohio, to the city solicitor of Col-linwood, it is held that municipalities have no authority to regulate the speed of motor cars by ordinance, but have the right to fix the zone over which the state law is operative. In a number of cases municipalities have attempted to regulate the speed of motor cars by ordinance and in every case the action has been set aside by the courts. The municipality has the authority to define what portions of the streets come within the provision of "closely-built-up or business sections," where the legal speed is 8 miles an hour.

Installs Motor Street Railway—A steam motor street railway recently has been installed for regular passenger service between Mandsville and New Orleans, La. A standard 30-horsepower White steamer engine and generator have been fitted to the front of the cars, making the cars practically motor cars on rails. This line is 16 miles long and steam motive power has been installed in order to reduce the cost of maintenance. The two street motor cars built as an experiment have proven so successful that more are now under construction. Each car is built to seat twenty-two people and the expense of maintaining the line under the present

power permits of a tremendous saving over the ordinary electric street railway maintenance.

Houston Club Reorganized—The club at Houston, Texas, has been reorganized with a membership of 200. E. R. Spotts has been elected president and Guy McLaughlin secretary. The Country Club at Houston is to have a garage 26 by 120 feet, which will be fitted with all the latest accessories for rapid repair work, and which will carry full stores for the use of the members, a majority of whom own cars.

Boosts National Highway—Touring the country in a 60-horsepower Stearns, Mr. and Mrs. W. H. Hanson and son arrived in Montgomery, Ala., December 14 on their way to New Orleans, having traveled from Atlanta, which was the last stop in their tour. Mr. Hanson is a retired Wall street broker and resides at Saratoga Springs, N. Y. From New York to Atlanta he followed the route of the proposed national highway from the north to the south, and declares the project to be perfectly feasible and urged Montgomeries to push a recently-talked-of extension of the highway from Atlanta to Montgomery when the main road shall have been completed.

On a Long Scout—A Midland scout car which has crossed the continent several times was at the Midland offices, 1851 Broadway, New York, last week and attracted considerable attention. The speedometer registered over 17,000 miles. J. Mora Boyls, president of the Midland company, started this car off again on a trip through northern New York which will take some 3 to 4 weeks. Mr. Read, wholesale manager of the concern, is with the car for the purpose of inspecting and establishing agencies, and at the same time map out a route for Midland owners' tour which will be announced shortly. The schedule calls for 200 miles per day. It is planned to have this car return in time for the opening of the Grand Central palace show.

Afraid to Tinker With Law—Sentiment among the members of the Ohio general assembly which meets in Columbus in January in regular session appears to be against the passage of an amendment to the present Ohio motor law, fixing the fees for registration upon the horsepower of the motor car. It is feared that such an amendment may wholly change the aspect of the law to such an extent as to take it from the category of police regulations and place it in the list of licenses which are expressly prohibited by the Ohio constitution. The present measure has been held valid on the theory that the state had power to exercise supervision over the operation of motor cars on the public highways in the interests of safety to the general public. It is not at all certain but that the supreme court would declare such a law unconstitutional. There would

be no objections against a general increase in the fees, providing the new scale was not exorbitant.

Starts Good Roads Body—J. H. Weeks, president of the Automobile Club of Delaware County, Pa., is organizing the Pennsylvania Good Roads Association. Dr. Donald McCaskey, of Witmer, is president of the Keystone State association, and an effort will be made to secure a big appropriation from the legislature to carry on the work.

Dean Succeeds Fletcher—The Massachusetts highway commission has appointed Arthur W. Dean to the place made vacant by the resignation of Secretary Austin B. Fletcher, who is going to California to take charge of the highway construction in San Diego county there. Mr. Dean, the new appointee, is well known in Boston, for he belonged in Taunton before going to New Hampshire. A few years ago he was made state engineer for New Hampshire and since that time he has been busy with the state highways there.

Convicts Helping Out—The new county road from Canon City to Colorado Springs, Colo., on which convict labor is being employed, it is expected will be finished in 18 months. The threatened tie-up will be obviated by the assistance which the Good Roads Association will give the project after the state appropriation is exhausted. The 500-foot hill in Dead Man's canon now is being excavated and the work will be finished about the first of the year. From Dead Man's hill the new road will follow the foothills closely and a descent into the creek bottom thus will be avoided.

Will Build Plank Highway—The good roads campaign in Oregon which is being pushed by motorists, dealers and public-spirited citizens generally is being vigorously prosecuted by the Coos Bay Automobile Club, recently organized at Marshfield, Ore. The first move of the club will be the completion of the plank highway between Marshfield and North Bend. It has been built to the city limits of Marshfield along the water front, and North Bend is ready to do its part. The club also will agitate the building of a first-class motor road between Coos Bay

and Conquille City and also a road from Eastside to Sumner. The members will give strong support to the building of a motor road to Roseburg, Ore.

Must Not Smoke—An amended regulation prohibiting owners of motor cars from allowing their machines to give off smoke and fumes in the streets of Washington, D. C., has been drafted by the corporation counsel. The old regulation only held good on certain of the downtown business streets, but the new regulation makes the same provision for all the streets in the District of Columbia. The new regulation was drafted because the court held that the old one was invalid since it discriminated in favor of certain streets. A test case was brought by John Leslie Watson.

Hartford Plans a Run—At a meeting of the contest committee of the Automobile Club of Hartford held recently, it was decided to conduct a 600-mile 3-days' endurance run next May or June. There is to be one control, that at Hartford, the cars departing from and returning to this city each of the 3 days. Next year's run will be just three times as long as that of this season and a great deal harder in every respect. Practically all of the principal towns in the state figure in the itinerary and it is estimated that 80 per cent of the people of the state can view the run without going away from their home towns. Each day's run is an even 200 miles. Each leg comprises a circle.

Jackson Statistics—The statistics of the 1,600-mile non-motor stop run of the Jackson from Jackson, Mich., to Bangor, Me., are most interesting and show the task of the car and the component parts. In the run the motor turned over without a single stop or hesitancy 3,552,000 times, during which time the carburetor delivered into its hungry and never satisfied cylinders just 7,104,000 charges of gas. The magneto generated 7,104,000 sparks to fire these 7,104,000 charges of gasoline to furnish the propulsive energy for the 1,600 miles. This same energy and horsepower developed on the 1,600 miles was sufficient to race the car into the air a distance of to raise the car into the air a distance of 560 miles.



MIDLAND SCOUT CAR NOW TRAVELING IN NORTHERN NEW YORK

In the Realm of the Commercial Car



RENARD TRAIN IN LONG VALLEY, ALDERSHOT, ENGLAND

MOTOR car road trains of the Renard type have been thoroughly tested by the British war office authorities in Long Valley at Aldershot, England. These exhaustive and severe tests were undertaken in order to determine the utility of motor cars, road trains and traction engines for military transport duty service. After a careful study of the operation of these devices on the continent General de la Croix, directing the maneuvers of the French Renard trains, placed at the disposal of the Seventieth Army Corps for food-supply transport, which carried out the entire service as required by the French war office.

The British trials at Aldershot comprised not only runs over the highway, hill-climbing, turning and reversing but also trips across the country, together with severe tests with full load under most difficult conditions. There were a number of runs of 100 miles at a speed of 10 miles per hour and careful tests were made of fuel consumption. It is stated that .43 gallons of fuel was required per train mile by these trains. For military service three kinds of motor service have been considered. The motor wagons or separately operated cars and tractors haul one or more trailers. The Renard train has a power-generating tractor with the motor power mechanically transmitted from the tractor to each of the following trailers, all of which contributes to the adhesion of the train, and the individual motor cars, which have been tried and proved their adaptability to the purpose of war-carrying materials of 4-ton weight. Tractors or single motor vehicles hauling one or more followers have high efficiency, but the tractor must insure the adhesion of the whole and must be heaviest in proportion to the increased weight and number of trailers.

With the third system of Renard train it is held that heavy tractors are avoided

as the vehicles are connected with the power-generating tractor by the system of joints which compels each of them to follow exactly in the track of the first one and enable the train to back correctly, the followers all contributing to the adhesion of the train.

It is urged that the drawbacks in the use of these are that it is impossible to split up the train as with isolated vehicles and an accident to the power-generating tractor stops all of the cars of the train and renders them useless. It is held that these difficulties, however, are not serious and the Renard trains form efficient means for provisioning an army. In reference to the use of motor cars in military service General Langlois of the French army makes the following observations:

"One would have thought at first that with the powers of rail transport at command the provisioning of huge armies would be more than play. It would be so,

in fact, if the railway always could penetrate to where the troops were quartered. This will be easily confirmed when it is considered that two trains, or three at the most, are sufficient to carry a day's rations for any army of four corps. During a big battle lasting several days, such as are to be looked for in the future, a railroad with a daily traffic of only twelve trains could furnish this army every day with a weight of at least 3,000 tons of ammunition, equivalent to 400 shots per cannon—supporting 144 pieces per army corps, as in Germany—and ten cartridges per run of twenty-four battalions."

"But railways necessarily are insecure. The Germans, in 1870 and 1871, were much harassed. Owing to the destruction of 'ouvrages d'art' on our railways they were for some weeks at Paris and at Sedan some 100 kilometers and at Orleans 100 kilometers from their supplies. Since then railways have multiplied, but the necessary traffic has greatly increased; so again we must expect in future to see armies separated by 100 kilometers from their railway terminus or chief magazine. Frankly, then, it seems absolutely impos-



PACKARD TRUCK LOADED WITH MOTOR AGE MAIL MATTER

English and French Military Tests



ENGLISH MILITARY AUTHORITIES TESTING RENARD TRAIN

sible to supply a modern army with rations and especially with ammunition by the means used hitherto.

"The whole economy of employing mechanical traction lies in this two-fold fact: 1—The useful weight carried by a motor car is five times greater than that of the load of a horse vehicle, 4,000 kilos instead of 800; 2—The motor cars can travel each day a distance four times greater than a wagon, 120 kilometers instead of 30. Mechanical traction thus gives twenty times better results than horse-drawn vehicles."

It is stated that heavy-weight motor vehicles have been tried for 3 years at the autumn maneuvers of the French war office with great success. At the maneuvers at Langres motor wagons were regularly employed to carry drinking water from Chaumont to the besieging camps. The average mileage of one of these wagons was 80 kilometers for 15 consecutive days; it reached 100 kilometers in a single day in a region abounding in very stiff hills.

At the southeastern French maneuvers the provisioning of the Eighteenth Corps was effected by means of wagons which

were sent to and from Bordeaux and the front, a distance of 100 kilometers. Two conveyers took turns. For instance, the one leaving Bordeaux in the morning would reach the point of contact with the service at the front toward 2 o'clock. Unloaded by 5 o'clock, it was sent back the same day 40 kilometers to the rear, thus leaving the ground free. The next day it would return to Bordeaux to be reloaded in readiness to start off again the day following. In favorable weather and on good roads the convoys sometimes have traveled 180 kilometers in a day, doing 100 kilometers of this distance loaded. The same year at the eastern French maneuvers the Eighth Corps was supplied by three Renard trains, each composed of a motor vehicle and three followers. From Besancon to the distributing in extremely hilly country, by routes varying each day, the mean distance was 90 kilometers. As no accidental stoppages occurred, one had to be invented; the mo-

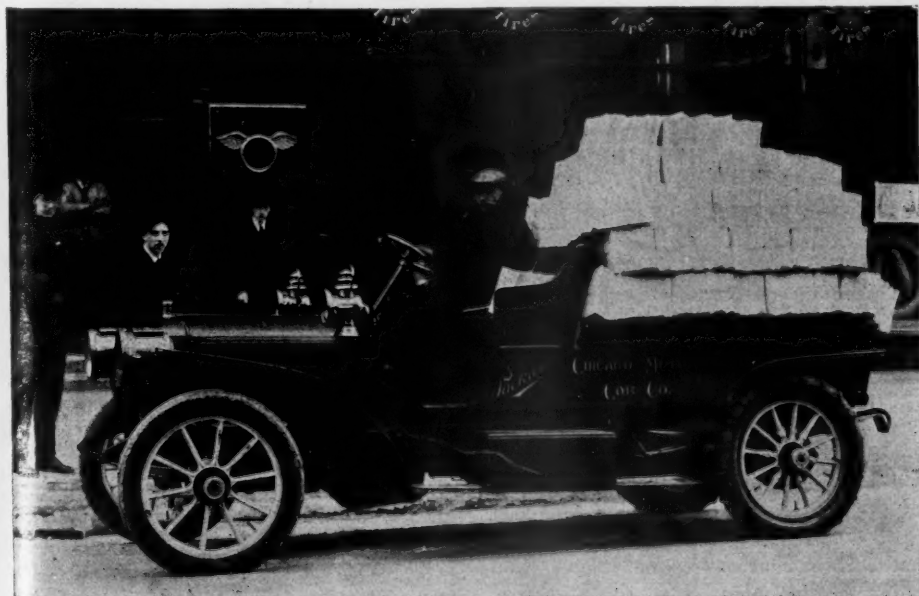
tor vehicle of one train hauled the six followers of two trains at the speed of 8 kilometers per hour.

At the central French maneuvers the eighth and ninth army corps were each fed by a convoy divided into three sections, composed of vehicles formed of groups as homogeneous as possible. The distance covered daily was from 70 to 100 kilometers at an average speed of 12 kilometers per hour. At this rate the progress of the convoy was effected in orderly manner, notwithstanding the lack of homogeneity of the vehicles, which were kept at a distance of 20 to 30 meters from each other. When hauling their extension abreast was very slight. Throughout the whole course of the maneuvers the service was carried out with the greatest regularity, without a minute's delay.

Going beyond wagons it appears that in 1908 the Ninth French Army Corps tried a motor meat van carrying 6,250 rations of fresh meat. Each day, after slaughtering, an average journey of 100 kilometers was made by the vehicle and the whole army corps, between 5 at night and 6 in the morning, was supplied with over 20,000 rations. General Langlois further stated from these trials it may be concluded that provisioning by motor vehicles will be realized in the circumstances indicated above as soon as the vehicles capable of being requisitioned for service with the army are sufficient in numbers. Undoubtedly the experience of Europe in motor cars for armies will be attended by similar satisfactory results in America.

MOTOR AGE'S BIG MAIL

Motor Age last week sent out a circular letter to each maker, dealer and garage man in the United States, extolling the merits of its show numbers in the way of classified advertising. The mail was so bulky that it required the services of a Packard truck to convey it to the postoffice, two trips being necessary.



PACKARD TRUCK USED FOR LIGHT DELIVERY WORK IN CHICAGO



Among the Makers and Dealers



Opens Simms Branch—The Simms Magneto Co. has opened large premises at 1780 Broadway, New York, for the purpose of distributing, assembling and repairing and fitting of its magnetos.

R. W. Lytle Changes—R. W. Lytle has resigned his position as assistant to General Manager Lewis, of the Rider-Lewis Motor Car Co., to assume similar duties with the Velie Motor Vehicle Co.

Grabowsky Building—The Grabowsky Power Wagon Co. is building an addition to its present factory building. This move is necessary in order to take care of the present demand for Grabowsky cars.

Has the Randolph Line—An agency for the Randolph line of motor trucks and delivery wagons has been taken in Indianapolis by the Van Camp Hardware and Iron Co. Such vehicles already have been sold to the Van Camp Packing Co., L. G. Deschler and the House of Crane, the two last named being wholesale cigar dealers.

Gets a New Store—The Charles Schiear Motor Car Co., of which C. Roy Clough manages the Columbus, O., branch, has closed a lease for a store 40 by 80 feet in a new building at Spring and Fourth streets. The Speedwell company, of Dayton, will open a Columbus agency in the same building under the charge of Kimmell Brothers. The Franklin Motor Car Co., with the Franklin and Reo, will also soon open a fine salesroom in the same structure.

Handling a Swiss Truck—Henry Ducasse & Co., American agents for the Darraq car, have taken the agency in this country for the Orion industrial motor vehicles manufactured at Zurich, Switzerland. These cars range in models from 1 to 6 tons capacity; the regular line consisting of wagon types, fire engines, brewers' trucks, oil wagon with 1,300 gallon capacity and motor-driven pump that fills or empties in 12 minutes; tip-wagons mechanically-tilted; omnibuses, ambulances, mail wagons, sprinkler carts, lorries with trailers, etc.

Peerless Building in Boston—Ground was broken this week for a new building on Beacon street at Commonwealth avenue, Boston, that is to be occupied by the Boston branch of the Peerless company. The site, selected is in the famous Back Bay amid the homes of the wealthy at the junction of two main thoroughfares over which pass thousands of cars every day. The new building will be used as a salesroom and administrative departments and is not in any sense a garage. The cost will be approximately \$200,000, and in design it will compare favorably with any building in the immediate vicinity. The building

will be six stories in height—90 feet wide by 100 feet deep, covering an area of about 10,000 square feet, giving a total working floor space of 60,000 square feet.

More Help Needed—The Gramm-Logan Motor Car Co., of Bowling Green, O., has increased its force to 130 workers, owing to the increase in orders for motor trucks. A night force has been put on and there is a general rush about the plant.

Patterson Buys Garage—Roy Patterson has purchased the garage business formerly conducted at 121 South Third street, Columbus, Ohio, by F. H. Lawell. Mr. Lawell is the leading spirit in the Franklin Motor Car Co., organized to handle the Franklin and Reo, in a different location.

Making Stutz Transmissions—The Stutz Auto Parts Co., of Indianapolis, organized within the past few weeks, is making the Stutz rear axle and transmission. It will manufacture two models—one for a 20-25-horsepower and the other 30-40-horsepower, both selective type, three-speeds. Its plant is located at Tenth street and Canal, Indianapolis.

Factory for Columbus—S. M. Comley and E. D. Davidson, president and secretary, respectively, of the National Fuel Co., of Columbus, Ohio, have assembled a two-cylinder runabout which probably will be manufactured in quantities next season. It is proposed to incorporate the Buckeye National Motor Car Co. and to locate the factory in Columbus.

Company Reorganizes—The Fort Pitt Motor Mfg. Co., of New Kensington, Pa., announces its reorganization with a capital of \$300,000. This concern now passes into the control of the General Engineering Co., of Pittsburg, of which James D. White is president. The Fort Pitt plant is to be enlarged immediately and the 1910 output will more than double that of 1909. Besides the Pittsburg Six which is a 70-horsepower car, a 40-horsepower machine will be built. Arthur J. Paige, manager of the old company, will have entire charge of the new enterprise.

Klaxon Wins a Case—The circuit court of the United States for the southern district of New York has just granted an injunction in the case of the Lovell-McConnell Mfg. Co. et al, vs. E. J. Willis Co. The case involves the Klaxon signals, which, covered by numerous patents, are sold under a conditional license fixing the retail price with a maximum discount of 5 per cent for actual cash. It is charged that certain concerns recently have been selling the signals for retail at a price considerably less than the license price. The owners of the Klaxon patents proceeded

against the E. J. Willis Co. and secured a decree signed by United States Circuit Judge Lacombe, ordering the injunction asked for in the bill of complaint.

Moves to Butler—The Trebert Gas Engine Co., formerly of Rochester, N. Y., now is located in its new plant at Butler, Ind., a move which greatly increases the company's capacity and makes it more centrally located.

Buffalo Dealers' Election—At its annual meeting recently the Buffalo Automobile Trade Association elected the following officers: President, Charles F. Monroe; vice-president, E. C. Bull; treasurer, Ralph E. Brown; secretary, John J. Gibson; executive committee, J. A. Cramer, Mason B. Hatch and George Ostendorf.

New Glide Agents—The Bartholomew Co., of Peoria, Ill., reports the following new agents, who will handle the Glide cars for 1910: L. R. Kershaw, Muskogee, Okla.; W. J. Dabney Implement Co., Atlanta, Ga.; Fred E. Gilbert garage, Jacksonville, Fla.; W. A. Shafer, Los Angeles, Cal.; Page Machinery and Auto Co., Page, N. D.; Auto Storage and Repair Co., Minneapolis, Minn.

Opens Western Branch—The Willard Storage Battery Co. has opened its western branch at 320 Dearborn street, Chicago, where it will carry the Autex sparking batteries, Elba lighting batteries, and Autex vehicle batteries. Repair facilities will be installed and parts and supplies for all types of batteries will be kept on hand. A complete line of Elba lamps and accessory materials for installing the Elba lighting system will be carried in stock.

Rushmores Abroad—The Rushmore Dynamo Works recently placed agencies for the sale of Rushmore lamps and generators in Berlin, St. Petersburg, Riga and Christiania. These are in addition to the recently opened branch stores at 1 Crow street, Dublin, and 33 Victoria building, Deansgate, Manchester. Adding these branches and agencies to the already well established London and Paris branches, the American tourist abroad is now able to find Rushmore goods practically throughout Europe.

Big Chain Order—One of the largest orders ever received by it has just been closed by the Baldwin Chain Co., of Worcester, Mass., with several car manufacturers for 35,000 motor car chains to be delivered during the coming year. The contract calls for three times as many chains as ever before turned out by the company, and the present factory is not large enough to do the work, so an addition now is being built in the rear of the present plant to have 10,000 square feet of space. The greater part of the chains or-

dered at this time are to be used on the 1911 models and the Baldwin company expects to have the order finished before December, 1910.

In a Big Garage—The Richmond Motor and Plumbing Co., of Richmond, Ky., handling the Buick and Lexington, is located in a garage 50 by 100 feet and which has a capacity of from thirty to forty cars.

Monogram Branch Moves—The Boston branch of the Columbia Lubricants Co., manufacturer of Monogram oils, has removed from 35 Hartford street to new quarters at 1,000 Boylston street, where it will have better facilities for handling its business.

Prevents Conflict of Names—The Auto Car Mfg. Co., of Buffalo, N. Y., changed its name to the Atterbury Motor Car Co., manufacturer of the Buffalo motor truck. Its object in making this change is to distinguish it from the Autocar Co., of Ardmore, Pa.

Mishawaka's Top Plant—Mishawaka, Ind., is to have a new factory to be known as the Mishawaka Carriage and Trimming Co., with J. W. Baugher as president. The new company will occupy a portion of the Niles Plow Co. building. The plant commenced operation Monday, December 6.

Toledo Has Another—The Twenty-First Street Garage Co., of Toledo, has been incorporated with an authorized capital stock of \$35,000. The new concern was launched to operate the new garage on Twenty-first street. The incorporators are: George L. Craig, John Craig, K. Vahey, L. L. Blood and C. C. Whitmore.

Texas Events—The Capital City Auto Co., of Austin, Tex., hopes to get into its new garage soon. The building adjoins its present location, 213 West Sixth street. J. V. Thomas is at present in Texas looking after the Mora interests. The Hupmobile now is handled in Austin by the Capital City Auto Co., which has just been appointed agent for the Kissel, Maxwell, Mora and Columbus electric.

Locates in Ralston—The Rogers Motor Car Co. is building a new plant at Ralston, Neb., which will be U-shaped and which will have about 36,000 square feet of floor space. It is expected the first cars will be turned out early in the year. Officers of the Rogers company are: President, Ralph Rogers; vice-president, C. A. Ralston; treasurer, C. A. Overholt, all of Chicago, and secretary, T. G. Travis, of Omaha.

England Orders Motor Wagons—The Chase Motor Truck Co., of Syracuse, N. Y., has closed a contract with the Leyland Motors, Ltd., of London, Eng., for 1,200 Chase motor wagons. This is claimed to be the largest order ever placed in the history of the commercial motor industry and by many times the largest export order for motor vehicles ever shipped. The Leyland Motors, Ltd., is credited with being the largest English concern making heavy com-

mercial trucks. The Chase is a high-wheel solid-tire motor wagon with a two-cycle air-cooled motor. It is made in three different weights, 12, 15 and 20 horsepower.

Jack Company Moving—Due to the large increase of business, the Buckeye Jack Mfg. Co., of Louisville, O., has been compelled to seek larger quarters and has therefore purchased a commodious factory at Alliance, O., to which it will remove on January 1.

Seeks Larger Quarters—The Curtis-Hawkins Co., that has the agency in Boston for the Speedwell, has leased a large place at 162-172 Columbus avenue, to which it proposes to move shortly. The salesrooms at the motor mart proved too small to accommodate the firm.

After an Addition—The Oswald Motor Co., of Goshen, Ind., has opened negotiations with the Big Four railroad for the lease of a piece of land on which to build an addition to its plant. A two-story brick building will be erected on the site and is to be ready for occupancy by March 15. The company manufactures motors.

Moody With Swinehart—C. W. Moody, formerly manager of the Pennsylvania Rubber Co.'s Chicago branch, has accepted the position of general sales manager of the Swinehart Tire and Rubber Co., Akron, Ohio, and not that of the Firestone as stated in Motor Age recently. Mr. Moody is well known to the trade, having been in the tire business for the past 5 years in Cleveland and Chicago.

Gilbert Increases Stock—The Gilbert Mfg. Co., of New Haven, Conn., has filed notice of an increase in its capital stock to the amount of \$50,000. This company recently has taken over the F. E. Bowers Co., of New Haven, and in the future will manufacture and market the Bowers carbureter. The company will erect a larger factory to take care of the constantly-increasing demands for its product. The of-

ficers of the Gilbert company are: F. E. Bowers, president; E. B. Spalding, treasurer; L. F. Meyer, secretary, and W. A. Rutz, sales manager.

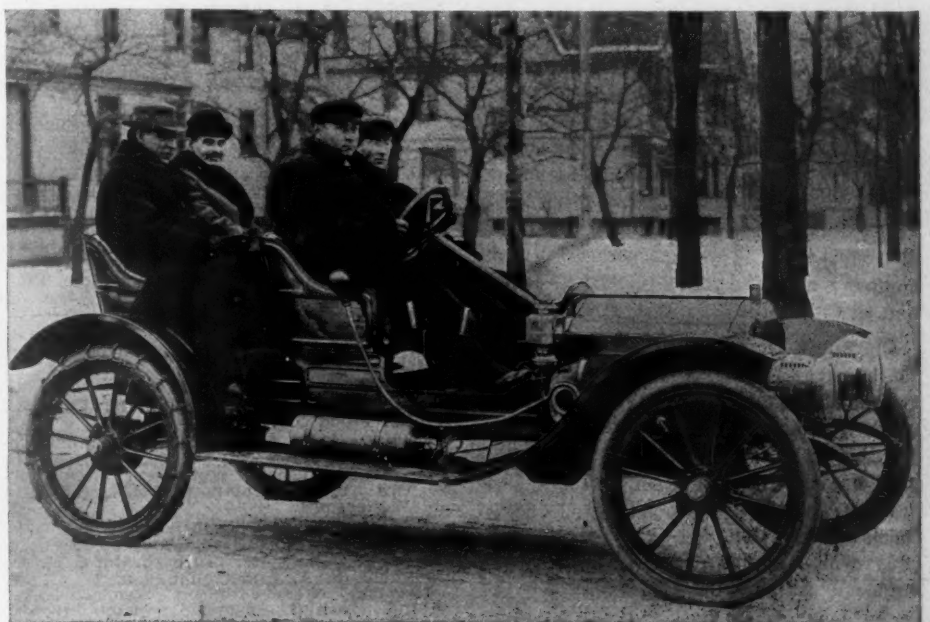
Take On Great Western—The Great Western Automobile Co., of Peru, Ind., has made agency arrangements with A. T. Ewing, Son & Deems, of Macomb, Ill., who will handle the Great Western 30.

Selling the Anhut—The Car Makers' Selling Co., with offices at 1256 Michigan avenue, Chicago, is sales manager for the Anhut six, made by the Anhut Motor Car Co., and which was described in last week's Motor Age.

Truck Company Expanding—The Gramm-Logan Motor Car Co., of Bowling Green, O., has concluded plans for another large factory, with a capacity of 1,000 truck chassis, costing \$96,000, which will be equipped with the latest machine tools.

New Parts Concern—The Yusted Axle and Transmission Co., of South Bend, Ind., has filed articles of incorporation with the county recorder and secretary of state for the formation of a company to manufacture parts. The incorporators and directors are Maurice L. Yuster and Arthur E. Wile, of Rochester, and Joseph W. Ricketts, of the Ricketts Auto Co. of South Bend.

Opens Speedometer Branch—The Stewart & Clark Mfg. Co., of Chicago, has opened its city sales office at 1312 Michigan avenue. This office has been opened for the express purpose of giving prompt attention to the wants of the city trade. The factory is located on Diversey boulevard and heretofore, if speedometers were to be installed, it was necessary to send the cars to the factory. From now on there will be a crew of installers at the city branch, which will be able to take care of this work at any time from 8 to 6 o'clock. W. J. Zucker has been installed as manager.



FIRST APPEARANCE ON THE ROAD OF THE NEW STUDEBAKER-FLANDERS ROADSTER



Brief Business Announcements



New York—Harry S. Houpt has decided to handle the Ohio car.

Portland, Ore.—M. B. Duffield has purchased the interests of Cuthbert & Smithson and will hereafter handle the Hupmobile cars in Portland.

Hood River, Ore.—W. M. Stewart, of the Stewart Hardware Co., has been appointed agent for the White steam and gasoline cars in this city.

Boston, Mass.—W. L. Russell & Co., who are the agents in this section of New England for the Apperson, have opened headquarters at 169 Huntington avenue.

Portland, Ore.—Fred A. Bennett, president of the Bennett Auto Co., in addition to supplying his sub-agents in Oregon, Washington and Idaho, will distribute Reo cars in the Hawaiian Islands.

Trenton, N. J.—O. N. Driscoll and Oliver Twist, who are the agents here for the Hupmobile and Mitchell cars, are looking for a new garage, as their old establishment is to be torn down to make way for the city hall improvements.

Trenton, N. J.—The Monroe Spring Tire Co., of Riverton, has been incorporated with a capital stock of \$100,000 to engage in the manufacture of springs, spring tires, rubber tires, etc. The incorporators are E. P. Monroe, F. G. Brown and P. T. Rhodes.

Akron, O.—The International Harvester Co. is planning the erection of additions to its plant, to be completed by next spring, so that it will be enabled to turn out 4,000 high-wheelers a year. At the present time the company is making about twelve machines a day, and more than \$75,000 worth of new machinery has been ordered for the local plant.

Detroit, Mich.—The Beyster Detroit Motor Co. has just commenced business and will engage in the manufacture of light delivery cars and runabouts. The concern has a capital stock of \$50,000 and has acquired the plant of Beyster, Thorpe & Co. It expects to turn out 1,000 cars during the first year. The incorporators of the company are H. E. Beyster, B. E. Brown and H. C. Munroe.

Cleveland, O.—The Baker Motor Vehicle Co. has acquired the corner of East Seventy-first street and Euclid avenue, and will make its headquarters there. A new building is to be erected with showrooms on the avenue and a garage on the East Seventy-first street side. One of the showrooms is to be occupied by the Baker company, while the other is to be used by the Standard Automobile Co., agent for the Packard car, while both will have garage facilities in the rear. The Park Motor Car Company, of Superior avenue and East One

Hundred and Second street, is to act as agent for the Speedwell.

Kansas City, Mo.—The Midland Motor Car Co. has just removed to its new quarters at 1523-1525 Grand avenue.

San Francisco, Cal.—Walter Grant and Fred Schaer have organized a new concern, to be located on Golden Gate avenue, to deal in second-hand cars.

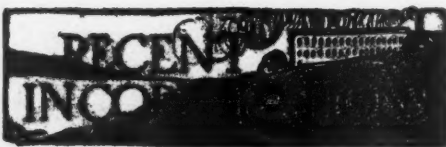
Detroit, Mich.—The Nielsen Motor Car Co., of this city, has filed articles of incorporation with a capital stock of \$50,000 and will manufacture cars.

Atlanta, Ga.—J. L. and J. J. McLendon, operating under the name of the National Motor Sales Co., have been appointed agent throughout the better part of the southeastern territory for the National.

Syracuse, N. Y.—Strait & Shaw are successors to the business of the Syracuse branch of the Buick Motor Co., located at 223-225 West Genesee street. They have seven counties in central New York under their jurisdiction.

Philadelphia, Pa.—The Continental Motor Co. has obtained the local representation for the Speedwell and Parry. Harry McCullough is the manager of the concern, which has located headquarters at 1416 Vine street.

Brooklyn, N. Y.—The Overland Motor Co. is preparing to move into its new building at 62 Flatbush avenue within the next few days. Extensive alterations are being made, and it is said that the company plans to take the agency for another car in addition to the Overland. The new



Indianapolis, Ind.—Citizens' Automobile Co., capital stock \$1,000; to manufacture parts and tools. Incorporators, McD. Purcell, S. D. Pierson and W. H. Stafford.

Buffalo, N. Y.—The Enterprise Automobile Supply Co., capital stock \$5,000. Incorporators, A. B. Newman, Charles Kuhn and W. H. Watson.

Utica, N. Y.—Central Auto Sales Co., capital stock \$25,000; to deal in motor cars. Incorporators, H. H. Levengston, W. L. Gee and C. B. Rice.

Brooklyn, N. Y.—Carpenter Motor Vehicle Co., capital stock \$100,000. Incorporators, H. L. Carpenter, H. R. Price and J. N. Carpenter.

Brooklyn, N. Y.—Borough Motor Cab Co., capital stock \$10,000.

New Rochelle, N. Y.—Bartnett Automobile Tire Co., capital stock \$80,000; to engage in the manufacture of motor car tires. Incorporators, F. A. Bartnett, P. J. Leahon and P. W. Bartnett.

Hoboken, N. J.—American Inner Tube Co., capital stock \$500,000; to manufacture motor car tires, tubes, etc. Incorporators, H. O. Coughlan, S. A. Anderson and J. W. Stout.

Newark, N. J.—Ronson Specialty Co., capital stock \$150,000; to engage in the manufacture of special tools and appliances, motor car supplies and metal ornaments, novelties and specialties. Incorporators, L. V. Aronson, J. F. Hayes and W. M. Ward.

building consists of two stories, the lower floor to be devoted to the show rooms.

Rochester, N. Y.—A permit has been granted to the Gillis-Strickland Motor Co. for the erection of a garage in Clinton avenue south.

Harrisburg, Pa.—Articles of incorporation have been filed by the Charleroi Auto Co., of Charleroi. The company has a capital stock of \$10,000.

Trenton, N. J.—The Packard Auto Renting Co., of Newark, has been incorporated with a capital stock of \$25,000 and will be located at 763 Broad street.

New York—The Victor Auto Storage Co., which has been operating a garage at 147 West Fifty-fifth street for the past several years, is now fitting up a salesroom where it will exhibit the Columbia car.

Kansas City, Mo.—F. C. Penfield, who has recently been connected with the Midland Motor Car Co., is now associated with the Regent Tire Co. In the future the interests of the Midland company will be looked after by W. S. Kellar.

Fort Wayne, Ind.—A. B. and Edward White and Harry Sprague are the incorporators of a new company which has been organized to manufacture a new axle invented by James Keenan, of South Bend. The new concern has a capital stock of \$100,000.

San Francisco, Cal.—The Pioneer Automobile Co., agent for the Chalmers-Detroit, Hudson, Thomas and Randolph, is planning the erection of a building for its own exclusive use in the near future. Its temporary quarters will be on Golden Gate avenue, near Gough street.

Dover, Del.—The Nyberg Auto Works Co., which is a Chicago corporation, has filed articles of incorporation under the laws of this state, with a capital stock of \$150,000, to buy, sell and deal in motor cars and do repair work. The incorporators are F. C. J. Steiber and F. W. Jenkins, both of Chicago.

Lansing, Mich.—The American Auto Trimming Co., of Detroit, has been incorporated with a capital stock of \$10,000. Another new concern is the Templeton-Dubrie Car Co., also of Detroit, which has a capital of \$150,000. The Gillespie Auto Sales Co., of Detroit, has been incorporated with a capital stock of \$25,000.

Austin, Tex.—The Brenham Automobile Co., of Brenham, has been incorporated, with a capital stock of \$5,000, by J. H. Beaumier, T. J. Pier and C. G. Botts. Another new company which has recently filed articles of incorporation is the Magnolia Motor Co., of Houston, which has a capital stock of \$1,000. The incorporators are E. R. Spotts and J. S. Culliman.